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CERN CAMAC NEWS

Special Issue :
CAMAC Product guide

for better communication

IMPORTANT NOTICE

THE CAMAC Bulletin of the ESONE Committee as a promotional review sponsored by the Commission of the European Communities* has ceased publication with the issue of number 14.

The European CAMAC Association, recently created and strongly supporting the aims of the Bulletin, is currently studying alternative publication methods.

Exceptionally this CAMAC News No. 9 is published as an ad interim solution and contains the CAMAC Product Guide as was made available by CERN to users and to the CAMAC Bulletin for its "yellow pages".

The distribution is to the normal CAMAC News mailing list plus the CAMAC Bulletin subscribers list as far as possible. Further details of any product may be obtained directly from the manufacturer.

Information regarding amendments, omissions, new products etc should be sent to Mr. A. Orêve, EP Division, CERN, 1211 Geneva 23, Switzerland until further notice.

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CAMAC PRODUCTS GUIDE

THIS GUIDE CONSISTS OF A LIST OF CAMAC EQUIPMENT WHICH IS BELIEVED TO BE OFFERED FOR SALE BY MANUFACTURERS IN EUROPE AND THE USA, THE INFORMATION HAS BEEN COMPILED BY CERN-EP-ELECTRONICS AND IS MAINLY BASED ON INFORMATION COMMUNICATED BY MANUFACTURERS AND AVAILABLE UP TO THE 20TH MAY 1976.

EVERY EFFORT HAS BEEN MADE TO ENSURE THE COMPLETENESS AND ACCURACY OF THE LIST, AND IT IS HOPED THAT MOST PRODUCTS AND MANUFACTURERS HAVE BEEN INCLUDED. INCLUSION IN THIS LIST DOES NOT NECESSARILY INDICATE THAT PRODUCTS ARE FULLY COMPATIBLE WITH THE CAMAC SPECIFICATIONS NOR THAT THEY ARE RECOMMENDED OR APPROVED BY THE ESONE COMMITTEE. SIMILARLY, OMISSION FROM THIS LIST DOES NOT INDICATE DISAPPROVAL BY THE ESONE COMMITTEE.

NO UPDATING INFORMATION FOR THE SOFTWARE SECTION HAS BEEN RECEIVED. THE READER IS REFERRED TO THE CAMAC PRODUCTS GUIDE IN CAMAC BULLETIN NO 14 OF DECEMBER 1975.

REMARKS ON SOME COLUMNS IN THE INDEX OF PRODUCTS

COLUMN

NC
- N IS NEW, C IS CORRECTED ENTRY

WIDTH
- 1 TO 25, INDICATES MODULE WIDTH OR - FOR CRATES - THE NUMBER OF STATIONS AVAILABLE
- 0 INDICATES UNKNOWN WIDTH OR FORMAT
- BLANK, THE WIDTH HAS NO MEANING
- NA INDICATES OTHER FORMAT, NORMALLY A 19 INCH RACK MOUNTED CHASSIS

NPR
- NUMBER IN BRACKETS IS ISSUE NUMBER OF THE BULLETIN IN WHICH THE ITEM WAS OR IS DESCRIBED IN THE NEW PRODUCTS SECTION

DELIV
- DATE ON WHICH ITEM BECAME OR WILL BECOME AVAILABLE

CLASSIFICATION GROUPS

INDEX OF PRODUCTS

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	.1 DATA MODULES= I/O TRANSFERS AND PROCESSING					
	.11 DIGITAL SERIAL INPUT MODULES ==SCALERS,TIME INTER= VAL AND BI=DIRECTIONAL COUNTERS,SERIAL CODED ETC					
	.111 SIMPLE SERIAL BINARY REGISTERS					
N	QUAD SCALER (16BIT,50MHZ)	400	POLON	1	/76	
	24 BIT SCALER (15MHZ)	CAM 2,01	METRIMPEX	1	/72	
	1X24 BIT BINARY BLIND SCALER (20MHZ NIM OR 10MHZ TTL I/P,EXT INHIBIT IN,OVF O/P)	J EB 10	SCHLUMBERGER	1	/71	
	MINISCALER (2X16BIT,30MHZ,SEPARATE GATES AND EXTERNAL RESET,NIM LEVELS)	002	NUCL. ENTERPRISES	1		
	MINISCALER(2X16BIT,30MHZ,SEPARATE GATES AND EXT RESET,NIM LEVELS)	C 104	RDT	1	/71	
	DUAL 150 MHZ 16 BIT SCALER (ONE 50 OHMS, ONE UNTERMINATED NIM INPUT PER SCALER)	2S 2024/16	SEN	1	/70	
	QUAD SCALER (4X12 OR 2X24 BIT, 15MHZ)	CAM 2,02	METRIMPEX	1	/72	
	DOUBLE SCALER (24/16BIT,50MHZ,2 I/P & 3 GATE MODES,INHIBIT, P1=OVERFLOW)	C=DS=24	WENZEL ELEKTRONIK	1	/72	
	DUAL 150 MHZ 24 BIT SCALER (ONE 50 OHMS, ONE UNTERMINATED NIM INPUT PER SCALER)	2S 2024/24	SEN	1	/70	
C	QUAD CAMAC SCALER (4X16BIT OR 2X32BIT, 40 MHZ)	1004	BORER	1	/76	
C	QUAD CAMAC SCALER (4X16BIT OR 2X32BIT, 100 MHZ	1004A	BORER	1	/76	
	TIME DIGITIZER (4X16BIT,50MHZ CLOCK,WITH CENTRE FINDER, USABLE WITH PRE=AMP 511)	1005	BORER	1	/72	
	SERIAL REGISTER (4X16BIT,2X32BIT SELECTABLE,25MHZ,COMMON GATE,NIM LEVELS)	SR 1605	GEC=ELLIOTT	1	/71	
	MICROSCALER (4X16 BIT,25MHZ,OPTIMIZED INPUT,3 NSEC,GIVES TYP 80MHZ COUNTING)	003=4	NUCL. ENTERPRISES	1	/71	(5)
	MICROSCALER(4X16BIT,2X32BIT SELECTABLE, 25MHZ,COMMON GATE,NIM LEVELS)	C 102	RDT	1	/71	
	4X16 BIT BINARY BLIND SCALER (50 MHZ, 2X32BIT SELECTABLE,COMMON GATE,NIM/TTL)	J EB 20	SCHLUMBERGER	1	/71	
	FOUR=FOLD SCALER (4X16BIT,2X32BIT SELECTABLE,50MHZ,COMMON GATE,NIM LEVELS)	4 S 2003/50	SEN	1	/69	
	FOUR=FOLD CAMAC SCALER (4X16BIT,40MHZ, ONE 50 OHMS,ONE HI=Z NIM I/P PER SCALER)	4 S 2004	SEN	1	/70	
	TIME DIGITIZER(4X16BIT,CLOCK RATE 70/85MHZ, WITH CENTER FINDING LOGIC)	TD 2031	SEN	1	/72	
	TIME DIGITIZER (4X16BIT,CLOCK RATE 70/85MHZ,NIM LEVELS)	TD 2041	SEN	1	/72	(4)
	SERIAL REGISTER (4X16BIT,2X32BIT SELECT= ABLE,100MHZ,COMMON GATE,NIM LEVELS)	SR 1608	GEC=ELLIOTT	1	/71	
	FOUR=FOLD SCALER(4X16BIT,2X32BIT SELECT= ABLE,100MHZ,COMMON GATE,NIM LEVELS)	4 S 2003/100	SEN	1	/70	
	SCALER=TIMER (4X24BIT, INT. 1MHZ CRYSTAL OSCILLATOR, RESOLUTION 10MHZ)	CAM 5,02	METRIMPEX	1	/73	
	QUAD COUNTING REGISTER(4X24BIT,NIM INPUT TTL INHIBIT IN,TTL CARRY AND OVF OUT)	709=2	NUCL. ENTERPRISES	1	/71	
	SCALER (4X24BIT, 50MHZ)	9051	NUCL. ENTERPRISES	1	/73	
	QUAD SCALER (4X24BIT, 125MHZ,INTERRUPT STRUCTURE, INDIVIDUAL INHIBIT INPUTS)	S1	JUERGER	1	/72	(6)
	QUAD SCALER (4X24BIT, 200MHZ,INTERRUPT STRUCTURE, INDIVIDUAL INHIBIT INPUTS)	S1=1	JUERGER	1	/73	
	QUAD 100MHZ SCALER (4X24BIT,DISCR LEVEL =0,5V,TIME=INTERVAL APPL,NIM INHIB I/P)	85A	JORWAY	1	/71	(2)
	QUAD SCALER (4X24BIT,300MHZ, 7=SEGMENT DISPLAY/SCALER, OVF GIVES LAM)	JEA 30	SCHLUMBERGER	3	/76	
N	QUAD BLIND SCALER (4 X 24BIT, 300MHZ)	JEB 30	SCHLUMBERGER	1	/76	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	TIME DIGITIZER (6 CHANNELS,16 BITS, 100 MHZ CLOCK RATE)	TD	JOERGER	1	/74	(11)
	12-CHANNEL 100MHZ SCALER (16BIT,-0,5V I/P THR, FAST CLEAR, CASCADABLE, LAM)	2552	LRS-LECROY	1	/75	
	12-CHANNEL 16 BIT SCALER (CERN SPS82135)	9054	NUCL, ENTERPRISES	1		(10)
	HEX TTL/NIM 50 MHZ SCALER	3610	KINETIC SYSTEMS	1	/73	
	HEX COUNTING REGISTER (6X24BIT, 100MHZ NIM & TTL LEVELS, TTL CARRY OVF, BIN)	320	HYTEC	1	/74	
	HEX NIM 100 MHZ SCALER	3615	KINETIC SYSTEMS	1	/73	(8)
	12-CHANNEL 100 MHZ SCALER(12X24BIT,-0,5V I/P THR, COMMON FAST CLEAR & INHIB, NIM)	2551	LRS-LECROY	1	/74	(12)
	.112 SIMPLE SERIAL DECADE REGISTERS					
	1X6 BCD DECADE SCALER (30 MHZ, BUILT-IN DISPLAY)	J EA 20	SCHLUMBERGER	1	/73	
	QUAD BCD SCALER (4X6 DECADES,30MHZ)	9021	NUCL, ENTERPRISES	1	/71	
	HEX COUNTING REGISTER (6X24BIT, 100MHZ NIM & TTL LEVELS, TTL CARRY OVF, BCD)	321	HYTEC	1	/74	
	.113 PRESET SERIAL BINARY REGISTERS					
N	PRESETTABLE COUNTER (DUAL, 24BIT, SEPARATE GATES)	420A	POLON	1	/75	
	PRESET COUNTING REGISTER (16BIT,10MHZ, NIM/TTL I/P,TTL INHIB + O/P,DATAWAY SET)	7039-1	NUCL, ENTERPRISES	1	/70	
	PRESET SCALER (24BIT)	CAM 2,04	METRIMPEX	1	/74	
	SCALER 50 MHZ (12/16/18/24BIT,PRESET WITH OVF LINE,CONSTANT DEADTIME)	C 72451-AJ-A1	SIEMENS	1	/72	
	PRESET SCALER(24/16BIT,50MHZ,DATAW, SET, BUFFER,2 I/P & 3 GATE MODES,INHIB,OVFLO)	C-PS-24	WENZEL ELEKTRONIK	1	/72	
	BIN,PRESET SCALER/BCD-DISPLAY(24BIT/8DEC 50MHZ,DATAWAY SET,2I/P&GATE MODES,INHIB)	C-SD-24	WENZEL ELEKTRONIK	1	/75	(14)
	DUAL PRESET COUNTING REGISTER(16BIT BIN)	2204	BI HA SYSTEMS	1	/73	
C	DUAL PRESET COUNTER/TIMER (2X16/24BIT, 25 MHZ MIN, SELF RELOADABLE)	1006	BORER	1	/74	
	2X24 BIT PRESET SCALER (100MHZ COUNTING)	J EP 30	SCHLUMBERGER	1	/73	
	PRESET QUAD BINARY COUNTER (4X24BIT, 75 MHZ, NIM & TTL LEVELS, TTL CARRY OVF)	310	HYTEC	1	/73	
	(SAME BUT 50 MHZ)	350		1	/74	
	.114 PRESET SERIAL DECADE REGISTERS					
N	REAL TIME CLOCK	712	NUCL, ENTERPRISES	0	/76	
	REAL TIME CLOCK (3,8 USEC TO 18,2 HRS, PRESET-TIME AND PRESET-COUNT MODES)	RTC 2014	SEN	1	/71	
	6 BCD DECADE SCALER (MANUAL AND DATAWAY PRESET,1 MHZ, START/STOP OUTPUT)	J EP 20	SCHLUMBERGER	2	/71	
	PRESET SCALER (20MHZ,8DECADE BCD,7 SEGM LED INDICATES CONTENTS AND PRESET NO)	PSR 0801	GEC-ELLIOTT	1	/72	(7)
	PRESET SCALER(10MHZ,8 DECADE BCD,DISPLAY OF 2 SIGNIF NUMBERS+EXP,MAN PRESET,NIM)	C 103	RDT	3	/71	
	DUAL PRESET COUNTING REGISTER(4 DECADES)	2204	BI HA SYSTEMS	1	/73	
	PRESET QUAD DECADE COUNTER (4X6 DECADES, 75 MHZ, NIM & TTL LEVELS, TTL CARRY OVF)	311	HYTEC	1	/73	
	(SAME BUT 50 MHZ)	351		1	/74	
	.117 OTHER DIGITAL SERIAL INPUT MODULES (BI-DIRECTIONAL SEQUENTIAL,SHIFT TYPES)					
	INCREMENTAL ENCODER INPUT (ACCEPTS QUADRATURE INPUTS, 24 BITS)	IE	JOERGER	1	/75	(14)
	UP/DOWN PRESETTABLE COUNTER(24BIT,10MHZ, GATE AND PULSE BURST OUTPUTS)	S2	JOERGER	1	/72	(6)
	UP/DOWN PRESETTABLE COUNTER(6 BCD DIGITS 10MHZ, MANUAL AND DATAWAY PRESET)	S2-1	JOERGER	1	/73	
	QUAD PRESETTABLE UP-DOWN COUNTER	3640	KINETIC SYSTEMS	1	/73	
	DUAL INCREMENTAL POSITION ENCODER (2X20 BIT X-Y DIGITIZATION BY UP-DOWN COUNTER)	2IPE 2019	SEN	1	/71	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	TOGGLING SCALER/TIMER (CONTINUOUS COUNTING WITH NO CHANGEOVER LOSS)	0311	SENSION	1	/75	
	,12 DIGITAL PARALLEL INPUT MODULES -=STORING AND NON= STORING REGISTERS,COINC, LATCH,LAM,STATUS ETC					
	,121 NON=STORING REGISTERS (GATES)					
	PARALLEL INPUT GATE (CERN SPS2133,16BIT)	9049A	NUCL, ENTERPRISES	1		(10)
	INPUT GATE (24BIT, SOURCE SELECTION BY 6BIT OUTPUT, DATAWAY GEN STROBE OUT)	207	JORWAY	1	/74	(8)
	INPUT GATE 24=BIT	3420	KINETIC SYSTEMS	1	/71	(4)
	PARALLEL INPUT GATE (24BIT)	CAM 2,07	METRIMPEX	1	/74	
	PARALLEL INPUT GATE (24 BIT)	9049B	NUCL, ENTERPRISES	1		(10)
	24=BIT ISOLATED INPUT GATE	3471	KINETIC SYSTEMS	1	/73	
	STATIC DIGITAL INPUT (2X16BIT, TTL)	C 76451=A8=A4	SIEMENS	1	/73	(6)
	DUAL PARALLEL STROBED INPUT GATE(2X24BIT HANDSHAKE MODE TRANSFER TO DATAWAY,TTL)	61	JORWAY	1	/70	
	DUAL PARALLEL INPUT GATE (2X24BIT,NON= INTERLOCK CONTROL TRANSF TO DATAWAY,TTL)	61=1	JORWAY	1	/70	
	INPUT GATE DUAL 24 BIT	3472	KINETIC SYSTEMS	1		
C	INPUT GATE (2X24BIT STATIC DATA, INTEGR FOR 1USEC, TTL LEVELS)	321	POLON	1	/74	
C	INPUT GATE (2X24BIT STATIC DATA, INTEGR FOR 10USEC, TTL LEVELS)	321A	POLON	1	/74	
	(SAME, INTEGRATION FOR 5MSEC)	321B		1	/74	
N	INPUT REGISTER DUAL 24 BIT	9069 (B)	NUCL, ENTERPRISES	1	8/76	
	PARALLEL INPUT GATE (3X16BIT INPUT FROM ISOLATING CONTACTS)	1061	BORER	1	/72	(4)
	3X16=BIT INPUT GATE (INPUTS ISOLATED BY OPTO=COUPLERS)	1063	BORER	1	/73	(8)
	DIGITAL INPUT REGISTER WITH OPTO COUPLER (4X8BIT PARALLEL INPUT GATES, WITH L)	DO 200=2203	DORNIER	1	/72	
	WITH FRONT PANEL CONNECTOR	DO 200=2203		1	/72	
N	256X24BIT PROM MODULE FOR 7025POC BRANCH	CS0088	NUCL, ENTERPRISES	1	6/76	
	DIGITAL INPUT REGISTER (5X8BIT PARALL INPUT GATES,5TH BYTE SETS L,TTL;1=H)	DO 200=2201	DORNIER	1	/72	
	WITH FRONT PANEL CONNECTOR	DO 200=2201		1	/72	
	(MODULE WITH ONLY LOGIC BOARD)	DO 200=2000		1	/73	
	DIGITAL INPUT REGISTER (5X8BIT PARALL INPUT GATES,5TH BYTE SETS L,HLL;1=H)	DO 200=2202	DORNIER	1	/72	
	WITH FRONT PANEL CONNECTOR	DO 200=2202		1	/72	
	PARALLEL INPUT GATE(16X16BIT,TTL, 1=LOW)	IG 25601	GEC=ELLIOTT	2	/72	
	128 BIT RECEIVER (ADDRESSABLE AS 8 16BIT WORDS OR 128 1=BIT WORDS)	C 341	INFORMATEK	1	/73	
	,122 STORING REGISTERS					
N	INPUT REGISTER (2X24BIT, TTL LEVELS, HANDSHAKE)	305	POLON	1	10/76	
N	2 X 24BIT INPUT REG, WITH OPT, COUPLING	JRO 10	SCHLUMBERGER	1	/76	
	OPTICAL ISOLATED INPUT REGISTER	2601	BI RA SYSTEMS	1	/74	
	DYN, DIG, INPUT (16BIT, TTL, LAM IF INPUT 0=1 OR 1=0 OR BOTH)	C 76451=A17=A4	SIEMENS	1	/73	(6)
	DYNAMIC DIGITAL INPUT 16BIT FLOATING I/P	C 76451=A17=A3	SIEMENS	1	/73	(6)
	PARALLEL=INPUT=REGISTER (SINGLE 16/24BIT OPT,READY SIGNALS,I/O TTL,CONTROL BUS)	MS PI 2 1230/1	AEG=TELEFUNKEN	1	/70	(1)
	CONTACT SENSE (24BIT ISOLATED INPUT REG, SENSES 12,24,48VDC OR 120VAC INPUTS)	CS	JOERGER	1	/75	
	CONTACT SENSE (24BIT ISOLATED INPUT REG, SENSES STATE OF SERIES SWITCHES)	CS=1		1	/75	
	INPUT REGISTER 24=BIT	3470	KINETIC SYSTEMS	1	/71	(4)
	INPUT REGISTER (24 INPUTS, + STROBE, OPTICALLY ISOLATED)	IR=2	JOERGER	1	/74	(11)
	BALANCED INPUT REGISTER WITH ADDRESSING	3430	KINETIC SYSTEMS	1	/72	(8)
	PARALLEL INPUT REGISTER (2X16BIT, TTL)	2312	BI RA SYSTEMS	1	/73	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPN
	DUAL INPUT REGISTER(2X16BIT,LAM & STROBE I/P & DATA-READ-STROBE O/P PER CHANNEL)	PR 1610 SERIES	GEC-ELLIOTT	1	/73	
	CAMAC UNTERM, I/P'S VIA SCHMITT TRIGGERS I/P FILTER RESPONSE 1USEC TO 10MS	PR 1611		1		
	DUAL 16 BIT INPUT REGISTER (TTL LEVELS, CERN SPECS 072)	2IR 2002	SEN	1	/72	
	DUAL 16 BIT INPUT REGISTER(EXT STROBE OR DATAWAY COMMAND STORES DATA,TTL LEVELS)	2IR 2010	SEN	1	/70	
	DIGITAL INPUT (2X16BIT FLOATING INPUT)	C 76451-A8-A3	SIEMENS	1	/73	(6)
	DUAL 24 BIT PARALLEL INPUT REGISTER(TTL)	2322	BI RA SYSTEMS	1	/73	
	DUAL INPUT REGISTER(2X24BIT,LAM & STROBE I/P & DATA-READ-STROBE O/P PER CHANNEL)	PR 2400 SERIES	GEC-ELLIOTT	1	/73	
	CAMAC UNTERM, I/P'S VIA SCHMITT TRIGGERS I/P FILTER RESPONSE 1USEC TO 10MS	PR 2401		1	/73	
	(SAME BUT WITH TWISTED PAIR INPUTS)	PR 2402		1	/73	
	(SAME BUT WITH OPTICAL ISOLATION INPUT, LOGIC 1 = 5V OR 12MA)	PR 2403		1	/73	
	DUAL INPUT REGISTER (2X24BIT,I/P INTEGR TTL, FULL LAM, OUTPUT STROBES)	220	HYTEC	1	/73	
	INPUT REGISTER (2X24BIT, 3 MODES OF DATA ENTRY, LED DISPLAY)	IR	JOERGER	1	/72	(7)
	DUAL PARALLEL INPUT REGISTER(2X24BIT,EXT LOAD REQUEST,4 OPER MODES,TTL LEVELS)	60A	JORWAY	1	/70	
	24-BIT DUAL PARALLEL INPUT REGISTER (A HAS LO-Z, B HAS UNTERMINATED INPUT)	9041A/9041B	NUCL, ENTERPRISES	1	/72	(7)
	PARALLEL INPUT REGISTER (2X24 BITS)	J RE 10	SCHLUMBERGER	1	/73	(7)
	DUAL INPUT REG,(2X24BIT,SEP,TIMING,LOGIC BITWISE POS/NEG,4TIMING& 3DATA IN MODES)	C-IC-48	WENZEL ELEKTRONIK	1	/75	(14)
	QUAD 24 BIT INPUT REGISTER (4X24, HAND-SHAKE DATA TRANSFER, 3 DATA ENTRY MODES)	QIR	JOERGER	1	/75	(14)
	DIGITAL INPUT REGISTER, EXTERNAL STROBE (4X8BIT INPUT LATCHES, 1X8BIT SET LAM) WITH FRONT PANEL CONNECTOR	DO 200-2204	DORNIER	1	/73	
		DO 200-2204		1	/73	

,123 TERMINATED SIGNAL INPUT REGISTERS (COINC, LATCH, PATTERN ETC)

	12 BIT PARALLEL INPUT REGISTER (NIM)	2351	BI RA SYSTEMS	1	/73	
	STROBED INPUT REGISTER (12BIT COINC AND LATCH,NIM LEVELS,PATTERN AND L-REQ APPL)	SIR 2026	SEN	1	/70	
	16BIT DISCRIMINATOR-COINCIDENCE REGISTER	2352	BI RA SYSTEMS	2	/75	
	FAST COINCIDENCE LATCH(16BIT,DISCR I/P, MIN 2 NSEC STROBE-SIGNAL OVERLAP)	64	JORWAY	1	/71	(1)
	16 FOLD DCR (16 DISCR, COMMON STROBE, -70MV THRESHOLD, FAST SUMMING OUTPUTS)	2340B	LRS-LECROY	2	/71	(6)
	16-CH COINCIDENCE REGISTER (STROBE I/P, 2NS OVERLAP,FAST SUM O/P AND CLEAR,NIM)	2341B	LRS-LECROY	1	/71	(4)
	16 CHANNEL STROBED COINCIDENCE (16 COINC INPUTS, COINC & LAM OUTPUT, 10NS RESOL.)	CAM 8,05	METRIMPEX	2	/74	
	PATTERN UNIT (16 INDIV NIM INPUTS,COMMON NIM GATE)	021	NUCL, ENTERPRISES	2	/71	(5)
	PATTERN UNIT(16BIT,I/P STROBED WITH COMMON GATE,10 NSEC OVERLAP,NIM LEVELS)	C 101	RDT	2	/71	
	16 BIT PATTERN UNIT (NIM I/P AND GATE)	J PU 10	SCHLUMBERGER	1	/72	
	PATTERN UNIT 16 BIT (16 INDIVIDUAL NIM INPUTS,COMMON NIM GATE, CERN SPECS 021)	16P 2007	SEN	2	/70	
	16 BIT PATTERN UNIT (CERN 071, 16 INDIV NIM INPUTS,COMMON NIM GATE,LED DISPLAY)	16P 2047	SEN	1	/72	(11)
	PARALLEL INPUT REGISTER (24BIT)	CAM 2,05	METRIMPEX	1	/74	

,124 MANUAL INPUT MODULES (WORD GENERATORS, PARAMETER UNITS)

N	SWITCHBOARD MEMORY INTERFACE (FOR SWITCHBOARD TYPE 230-1 & 230-2	230	POLON	1	9/76	
N	SWITCHBOARD MEMORY (16 WORDS, 16 BIT, USABLE WITH 230 INTERFACE)	230-1	POLON		9/76	
N	SWITCHBOARD MEMORY ADAPTER (EXPANDER)	230-2	POLON		9/76	
N	WORD GENERATOR(24BIT)	233	POLON	1	/75	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	PARAMETER UNIT 12 BIT (PROVIDES 12 BIT COMMUNICATION,PUSH BUTTON L=REQUEST)	P 2005	SEN	1	/70	
	MANUAL INPUT REGISTER (INPUTS A HAND=SET 16=BIT WORD, MANUAL AND ELECTR LAM I/P)	1041	BORER	1	/73	(8)
	24 BIT PARAMETER UNIT	2501	BI RA SYSTEMS	1	/73	
	WORD GENERATOR (24BIT WORD MANUALLY SET BY SWITCHES)	WG 2401	GEC=ELLIOTT	1	/71	
	DATA SWITCHES (16/24 BITS,READABLE + CONTENT ADDR)	C 322	INFORMATEK	1	/72	
	MANUAL INPUT/OUTPUT (TEST UNIT PROVIDES MANUAL DATA INPUT & VISUAL DATA OUTPUT)	MI/O	JOERGER	1	/75	
	MANUAL INPUT/OUTPUT REGISTER (24 BITS, SWITCH I/P + LAM, 24 LED O/P REGISTER)	201	JORWAY	1	/74	(11)
	24=BIT MANUAL INPUT 24=BIT MANUAL INPUT	3460 3461	KINETIC SYSTEMS	2 1	/73 /75	
	WORD GENERATOR (24 BITS OF BINARY DATA, SWITCH SELECTED)	9020	NUCL, ENTERPRISES	1	/71	(8)
	MANUAL REGISTER (FOUR 16 BIT WORDS)	231	POLON	3	/74	
	PARAMETER UNIT (QUAD 4=DECADE BCD PARAMETERS MANUALLY SET)	022	NUCL, ENTERPRISES	4	/71	(8)
	PARAMETER UNIT (QUAD 4 DECADE BCD PARAMETERS MANUALLY SET)	C 105	RDT	4	/71	
	.127 OTHER PARALLEL INPUT MODULES (INCL, LAM AND STATUS REGISTERS,SEE .232 FOR LAM GRADER)					
	16=BIT INTERRUPT REGISTER (STATUS COMPARED,CHANGE GIVES LAM)	1051A	BORER	1	/72	
	PRIORITY INPUT REGISTER(12BITS ORED TO LAM,FAST COINC LATCH APPL,MASK REGISTER)	63	JORWAY	2	/70	
	INPUT REGISTER (12 BIT, ORED TO LAM, COINCIDENCE LATCH APPL, NIM INPUTS)	65	JORWAY	1	/74	
	INTERRUPT REQUEST REGISTER (16 INPUTS, ANY INPUT GIVES LAM)	CAM 2,09	METRIMPEX	1	/72	
	INTERRUPT REQUEST REGISTER (8 CHANNELS)	9608	NUCL, ENTERPRISES	0		(14)
	INTERRUPT REQUEST REGISTER	EC 218	NUCL, ENTERPRISES	1		
N	EXTERNAL LAM REGISTER (24BIT, MASKING CAPABILITY)	303	POLON	1	10/76	
	INTERRUPT ALARM REGISTER (16 BITS, INDIVIDUALLY MASKABLE)	J IR 10	SCHLUMBERGER	1	/74	(11)
	64 LINE SURVEYOR (SINGLE OR CONTINUOUS SURVEY CYCLES, 3 SURVEY MODES)	64LS 2052	SEN	1		(9)
	STATUS INTERRUPT (24BIT,I/P&LATCH&LAM& MASK,GROUP&SEL=LAM=TEST,VAR,LOGIC&LEVEL)	C=SI=24	WENZEL ELEKTRONIK	1	/74	(12)
	.13 DIGITAL OUTPUT MODULES ==SERIAL/ CLOCKS,TIMERS, PULSE GENERATORS, PARALLEL/ TTL OUTPUT,DRIVERS					
N	CAMAC CLOCK	CU 1	WEHRMANN	1	/78	
	.131 SERIAL OUTPUT MODULES (CLOCKS, TIMERS, PULSE GEN)					
	PRESET SCALER (LEVEL OR PULSE TRAIN O/P, DURATION SET BY COMMAND,SINGLE & REPEAT)	PSR 0801	GEC=ELLIOTT	1	/73	
	CLOCK PULSE GENERATOR (10 FIX & 1 PRO= GRAMMABLE O/P, INT, 1MHZ, EXT, MAX 5MHZ)	CAM 5,01	METRIMPEX	1	/73	
	SCALER=TIMER (4X24BIT, INT, 1MHZ CRYSTAL OSCILLATOR, RESOLUTION 10MHZ)	CAM 5,02	METRIMPEX	2	/73	
	CRYSTAL CONTROLLED PULSE GENERATOR(7 DE= CADES=1HZ TO 1MHZ=500NS PULSES OUT,TTL)	PG 0001	GEC=ELLIOTT	1	/71	
	REAL TIME CLOCK (4SEC CLOCK/5MSEC STOP WATCH)	C 320	INFORMATEK	1	/72	
	CLOCK GENERATOR (INT 10MHZ, EXT 50MHZ, 8 DECADE STEPS,PLUS PROGRAMMABLE OUTPUT)	CG	JOERGER	1	/72	(7)
	GATED CLOCK (10MHZ TO 1HZ, INT=EXT CLOCK, SYNCHRONOUS GATING)	217	JORWAY	1	/74	(11)
	CLOCK PULSE GENERATOR (7 OUTPUTS=1HZ TO 1MHZ=IN DECADE STEPS,10MHZ EXT IN,TTL)	7019=1	NUCL, ENTERPRISES	1	/70	
	CLOCK GENERATOR (INT 1MHZ, EXT 10MHZ, 7 DECADES 1HZ=1MHZ TTL, .5USEC WIDTH O/P	730A	POLON	1	/74	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELAY	NPR
	CLOCK PULSE GENERATOR(7 DECADES=1HZ TO 1MHZ=500 NSEC PULSES OUT,TTL AND NIM)	C 109	RDT	1	//1	
	1 HZ = 1 MHZ QUARTZ CLOCK (7 O/P = 1HZ TO 1MHZ=200 TO 800 NSEC WIDTH,TTL LEVEL)	J HQ 10	SCHLUMBERGER	1	//1	
	QUARZ=CLOCK WITH 2 TIMER FUNCTIONS	C 76451=A14=A2	SIEMENS	1	//2	
	CAMAC=CLOCK=GENERATOR(7 DECADES=10MHZ TO 1HZ,50/500 NSEC O/P PULSES,2,8V/50 OHMS)	C=CG=10	WENZEL ELEKTRONIK	1	//1	
	CLOCK/TIMER (0,001S TO 10 HRS TIME INTERVAL,TIME=OF=DAY OUTPUT)	1411	BORER	1	//2	(3)
	REAL TIME CLOCK (COUNTS ,1 SEC TO 999 DAYS, DISPLAYS HRS/MIN/SEC, 50/60HZ GEN)	RTC	JOERGER	2	//3	(7)
	WATCHDOG TIMER (MONITORS SYSTEM ACTIVITY GENERATES AUDIO ALARM & CONTACT CLOSURE)	WT	JOERGER	1	//5	(14)
	REAL TIME CLOCK	9064	NUCL. ENTERPRISES	1		(10)
	REAL TIME CLOCK (3,8 USEC TO 18,2 HRS, PRESET=TIME AND PRESET=COUNT MODES)	RTC 2014	SEN	1	//1	
	INTERVAL TIMER/WATCHDOG (100USEC=300SEC INTERVAL, 1 SEC=100 SEC TIMEOUT)	EC 384	SENSIUN	1	//4	(13)
	DEAD TIME COUNTER	2203	BI RA SYSTEMS	1	//4	
	TIMER MODULE	3655	KINETIC SYSTEMS	1	//3	
	TIME BASE (10 TO 100MHZ IN INCREMENTS OF 10MHZ, USED WITH TD 2031/TD 2041)	TB 2032	SEN	1	//1	
	TIMER (MIN 1USEC,OVF FROM COUNTER=PP1)	C 76451=A12=A1	SIEMENS	2	//3	(6)
	TEST PULSE GENERATOR (5 TO 50 NSEC NIM O/P PULSE DERIVED FROM 81,F(25) OR EXT)	TPG 0202	GEC=ELLIOTT	1	//1	
	TEST PULSE GENERATOR (NIM PULSE PAIR)	215	JORWAY	1	//5	
	8 CHANNEL DELAY GENERATOR (DELAY 0 TO 99 TIMES CLOCK, DELAYS CASCADABLE)	220	JORWAY	8	//4	
	SERIAL OUTPUT REGISTER (12/16/24 BIT, SCALER OR SHIFT REG, INT, 100HZ & 1MHZ)	CAM 2,11	METRIMPEX	1	//3	
N	PRECISION PULSE GENERATOR (0 TO +=10VOUT 1 TO 500US DECAY TIME,50HZ REP,FREQ,)	1108	PULON	1	11//6	
	DUAL PROGRAMMED PULSE GENERATOR(50HZ/ 2KHZ/5MHZ PULSE TRAIN,LENGTH BY COMMAND)	2PPG 2016	SEN	1	//1	

,132 PARALLEL OUTPUT REGISTERS (TTL,HTL,NIM ETC)

N	OUTPUT REGISTER (2X24BIT, TTL LEVELS, HANDSHAKE)	350	PULON	1	10//6	
	OPTICAL ISOLATED OUTPUT REGISTER	3601	BI RA SYSTEMS	1	//4	
	12 BIT PARALLEL OUTPUT REGISTER (NIM)	3251	BI RA SYSTEMS	1	//3	
	15 BIT PARALLEL OUTPUT REGISTER (BIT ADDRESSABLE, NIM LEVELS OR PULSES)	C 343	INFORMATEK	1	//3	
	12 BIT OUTPUT REGISTER(DC OR PULSE O/P, UPDATING STROBE OUTPUT,NIM LEVELS)	41	JORWAY	1	//1	(2)
	OUTPUT REGISTER (12BIT, NIM PULSES OR LEVELS OUT)	OR 2027	SEN	1	//0	
	DIFFERENTIAL OUTPUT REGISTER	3030	KINETIC SYSTEMS	1	//2	(8)
	PARALLEL OUTPUT REGISTER (24BIT, OUTPUT WITH CAMAC STANDARD)	CAM 2,12=3	METRIMPEX	1	//3	
	OUTPUT REGISTER (24 BIT, 16 MA 5V OUT)	9600A	NUCL. ENTERPRISES	0		(13)
	OUTPUT REGISTER (24BIT,OPTO=COUPLER,7MA)	9603	NUCL. ENTERPRISES	0		(13)
	PARALLEL OUTPUT REG. (24BIT,NEG/UPT POS TTL,ADJ, DURATION&LEVEL,4 TIMING MODES)	C=OC=24	WENZEL ELEKTRONIK	1	//3	(10)
	DUAL 16BIT PARALLEL OUTPUT REGISTER(TTL)	3212	BI RA SYSTEMS	1	//3	
	DUAL 16 BIT OUTPUT REGISTER (SELECTABLE O/P STAGES ON PLUGABLE PC, FP CONNECTOR)	2OR 2051	SEN	1		(9)
	DUAL 24 BIT PARALLEL OUTPUT REGISTER	3222	BI RA SYSTEMS	1	//3	
	OUTPUT REGISTER (2X24BIT OR 6X8BIT, LED DISPLAY)	OR	JOERGER	1	//2	(7)
	24=BIT DUAL OUTPUT REGISTER	9042	NUCL. ENTERPRISES	1	//2	(7)

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELAY	NPN
	DUAL OUTPUT REGISTER (2X24BIT, DATAWAY READ AND WRITE, HANDSHAKE CONTROL, LO=Z)	9043A	NUCL. ENTERPRISES	1		(7)
	(SAME BUT HI=Z)	9043B		1		(7)
	PARALLEL OUTPUT REGISTER (2X24 BITS)	J RS 10	SCHLUMBERGER	1	/73	(7)
	DIGITAL OUTPUT REGISTER (X8BIT PARALL, OUTPUT REGISTER,NO L,TTL,1=H)	DO 200-2701	DORNIER	1	/72	
	WITH FRONT PANEL CONNECTOR	DO 200-2701		1	/72	
	(MODULE WITH ONLY LOGIC BOARD)	DO 200-2500		1	/73	
	DIGITAL OUTPUT REGISTER (4X8BIT PARALL, OUTPUT REGISTER, HLL 24V)	DO 200-2705	DORNIER	1	/73	
	WITH FRONT PANEL CONNECTOR	DO 200-2705		1	/73	
C	WITH FRONT PANEL CONNECTOR, INVERTING	DO 200-2706		1	/73	
	DIGITAL OUTPUT REGISTER (4X8BIT PARALL, OUTPUT REGISTER, HLL 24V)	DO 200-2707	DORNIER	1	/73	
	WITH FRONT PANEL CONNECTOR	DO 200-2707		1	/73	
C	WITH FRONT PANEL CONNECTOR, INVERTING	DO 200-2708		1	/73	
	DORNIER MODULES ALSO MARKETED BY SIEMENS		SIEMENS			
	QUAD 24 BIT OUTPUT REGISTER (4X24, HAND-SHAKE DATA TRANSFER, PROG, O/P POLARITY)	QOR	JOERGER	1	/75	(14)
	128 BIT OUTPUT REGISTER (ADDRESSABLE AS 8 16BIT OR 128 1-BIT WORDS)	C 342	INFORMATEK	1	/73	

.133 PARALLEL OUTPUT DRIVERS (OPEN COLL.,RELAY, ETC)

C	TRIAC OUTPUT REGISTER (110V OR 220V AC) (BITS, 2 AMPS, ZERO VOLTAGE SWITCHING)	LT	JOERGER	1	/74	
	12 BIT OUTPUT REGISTER (RELAY CONTACTS, SELECTIVE SET/CLEAR LAM GENERATION)	240	JORWAY	1	/75	
	8 CHANNEL TIMED TRIAC OUTPUT	3040	KINETIC SYSTEMS	2	/74	(13)
	8 BIT TRIAC OUTPUT REGISTER	3080	KINETIC SYSTEMS	1	/73	
	12-BIT OUTPUT REGISTER (WITH OPTICAL ISOLATION,OPEN COLL O/P, MAX 30V/100MA)	3082	KINETIC SYSTEMS	1		
	12-BIT OUTPUT REGISTER WITH ISOLATED RELAY	3087	KINETIC SYSTEMS	1	/71	(4)
	DRIVER (16BIT,OPEN COLLECTOR OUTPUT VIA MULTIWAY CONNECTOR,MAX 150MA/LINE)	9002	NUCL. ENTERPRISES	1	/71	
C	OUTPUT REGISTER (16BIT, 50V/,05A MAX)	360	POLON	1	/73	
C	OUTPUT REGISTER (16BIT, 150V/,1A MAX)	360A	POLON	1	/73	
C	OUTPUT REGISTER (16BIT, 25V/,5A MAX)	360B	POLON	1	/73	
	16-BIT OUTPUT REGISTER (ISOLATED RELAY CONTACTS & LATCHBACK INPUT)	3094	KINETIC SYSTEMS	1	/74	
	RELAY DRIVER (16 WAY RELAY OUTPUT)	J RO 10	SCHLUMBERGER	1	/73	(8)
	PARALLEL OUTPUT REGISTER (16BIT REED RELAY,MAX SWITCHED PWR 10W,4 TIMING MODES)	C-OR-16	WENZEL ELEKTRONIK	1	/72	(10)
	PARALLEL OUTPUT REGISTER (24BIT, OUTPUT WITH OPEN COLLECTOR, EXT, 30V/100MA)	CAM 2,12-1	METRIMPEX	1	/73	
	PARALLEL OUTPUT REGISTER (24BIT, OUTPUT WITH OPEN COLLECTOR, TTL)	CAM 2,12-2	METRIMPEX	1	/73	
	DRIVER (24BIT OUTPUT REGISTER,SET AND READ BY COMMAND,24BIT I/P DATA ACCEPTED)	9017	NUCL. ENTERPRISES	1	/71	(1)
	OUTPUT REGISTER (24 BIT, 40 MA 30V OUT)	9600B	NUCL. ENTERPRISES	0		(13)
	(SAME INVERTED OUTPUTS)	9600C		0		(13)
	OUTPUT REGISTER (24 BIT, 1 AMP 60V OUT)	9601	NUCL. ENTERPRISES	0		(13)
	(SAME WITH RELAY CONTACTS, MUX CONCEPT)	9602A		0		(13)
	(SAME WITH RELAY CONTACTS,FREE CONTACTS)	9602B		0		(13)
	OUTPUT REGISTER (2X16BIT,OPEN COLLECTOR)	1084	BORER	1	/74	
	OUTPUT DRIVER(2X16BIT,40MA SINKING,1=LO, DATAWAY READ & WRITE,LAM I/P,STRUBE O/P)	OD 1613	GEC-ELLIOTT	1	/72	
	(SAME, 1=HI)	OD 1614		1	/72	
	OUTPUT DRIVER(2X16BIT,125MA SINKING,1=LO DATAWAY READ & WRITE,LAM I/P,STRUBE O/P)	OD 1617	GEC-ELLIOTT	1	/72	
	(SAME, 1=HI)	OD 1618		1	/72	
	OUTPUT DRIVER(2X16BIT,TOTEMPOLE,30 LOADS DATAWAY READ & WRITE,LAM I/P,STRUBE O/P)	OD 1620	GEC-ELLIOTT	1	/72	
	2X16 OR 4X8 BIT OUTPUT REGISTER	J RS 30	SCHLUMBERGER	1	/74	(11)
	DUAL 16 BIT OUTPUT REGISTER (TTL LEVELS, OPEN COLL OUTPUTS VIA CABLE)	20R 2008	SEN	1	/70	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	DUAL OUTPUT DRIVER (200MA SINKING,24V)	2OR 2051HC	SEN	1		(9)
	DUAL OUTPUT DRIVER (HI VOLTAGE DRIVER)	2OR 2051HV	SEN	1		(9)
	DIGITAL OUTPUT (2X16BIT, MAX 30V)	C 70451-A9-A4	SIEMENS	1	/73	(6)
	OUTPUT REGISTER (2X16BIT VIA ISOLATING CONTACTS)	1082	BORER	1	/72	(4)
	DIGITAL OUTPUT (2X16BIT RELAYS)	C 70451-A9-A3	SIEMENS	1	/73	(6)
	PARALLEL-OUTPUT REGISTER (24BIT, OPEN COLLECTOR OUTPUT, HANDSHAKE FACILITY)	MS PO 2 1230/1	AEG-TELEFUNKEN	1	/72	(4)
	OUTPUT DRIVER(2X24BIT,40MA SINKING,1=LO, DATAWAY READ & WRITE,LAM I/P,STROBE O/P)	OD 2403	GEC-ELLIOTT	1	/72	
	(SAME, 1=HI)	OD 2404		1	/72	
	OUTPUT DRIVER(2X24BIT,125MA SINKING,1=LO DATAWAY READ & WRITE,LAM I/P,STROBE O/P)	OD 2407	GEC-ELLIOTT	1	/72	
	(SAME, 1=HI)	OD 2408		1	/72	
	OUTPUT DRIVER(2X24BIT,TOTEMPOLE,30 LOADS DATAWAY READ & WRITE,LAM I/P,STROBE O/P)	OD 2410	GEC-ELLIOTT	1	/72	
	DUAL OUTPUT REGISTER (2X24BIT, OPEN COLL O/P, FULL LAM, OUTPUT STROBES)	200-2	HYTEC	1	/73	
	OUTPUT REGISTER (2X24BIT OR 6X8BIT, 250MA SINKING, DIODE CLAMPED)	OR-1	JOERGER	1	/73	
	DUAL 24 BIT OUTPUT REGISTER(DC OR PULSE O/P,UPDATING O/P STROBE,TTL OPEN COLL)	40	JORWAY	1	/71	(2)
	DUAL 24 BIT OUTPUT REGISTER (DC OR PULSE O/P UPDATING, 300MA SINK, DIODE CLAMPED)	40-2	JORWAY	1	/74	
	DUAL 24-BIT OUTPUT REGISTER (OPEN COLL DRIVERS, MAX 24V OR 250MA, REAR OUTPUTS)	3072	KINETIC SYSTEMS	1		
	DIGITAL OUTPUT REGISTER (4X8BIT PARALL, OUTPUT REGISTER,NO L,OPEN COLL O/P,1=H)	DO 200-2702	DORNIER	1	/72	
	WITH FRONT PANEL CONNECTOR, 1=HI	DO 200-2702		1	/72	
	WITH FRONT PANEL CONNECTOR, 1=LO	DO 200-2703		1	/72	
	DIGITAL OUTPUT REGISTER WITH REED RELAYS (4X8BIT OUTPUT REG, OPEN CONTACT=0)	DO 200-2704	DORNIER	1	/71	
	WITH FRONT PANEL CONNECTOR	DO 200-2704		1	/71	

,14 DIGITAL I/O, PERIPHERAL AND INSTRUMENTATION INTER- FACING MODULES --SERIAL AND PARALLEL I/O REGS, PRINTER-,TAPE-,DVM-,PLOTTER- AND ANALYSER INTER- FACES,STEP-MOTOR DRIVERS,SUPPLY CTR,DISPLAYS

N	COLOR DISPLAY CONTROLLER (SMALL PROGRAMMING EFFORTS, SUITED FOR OUTPUT OF FAST-RUNNING PICTURES)	DO 200-2931	DORNIER	12	/75	

,141 SERIAL INPUT/OUTPUT MODULES (GENERAL PURPOSE)

N	SERIAL IN/OUT MODULE (TRANSFER UP TO 1KM CONTAINS A DATA TRANSMITTER, DATA RECEIVER AND 8 CONTROL OUTPUTS)	DO 200-2916	DORNIER	1	/75	
	SERIAL INPUT/OUTPUT REGISTER 16BIT CODED	9063	NUCL. ENTERPRISES	1	/74	(13)
N	SERIAL BRANCH ADAPTOR 20MA CURRENT LOOP	9084	NUCL. ENTERPRISES	1	8/76	
N	COLOUR DISPLAY DRIVER,JOYSTICK INTERFACE	9062/J	NUCL. ENTERPRISES	2	8/76	
N	TELETYPE INTERFACE 20MA 110 BAUD TO 9600 BAUD SWITCHED	9047	NUCL. ENTERPRISES	1	10/76	

,142 PARALLEL I/O REGISTERS (GENERAL PURPOSE)

	UNIVERSAL INPUT/OUTPUT REGISTER (2X16BIT INPUT, 1X16BIT OUTPUT, RELAYS OPTIONAL)	1031A	BORER	1	/75	
N	UNIVERSAL IN/OUT MODULE (16BIT DATA IN) OUT, 6BIT STATUS TO AND FROM UNIT; 4 INTERRUPTS, 3 STROBES TO UNIT)	DO 200-2915	DORNIER	1	/75	
	INPUT RELAY ADAPTER (24BIT I/P RELAY COILS, O/P TO CAM 2,05/CAM 2,09)	CAM 8,02-1	METRIMPEX	2	/75	
	OUTPUT RELAY ADAPTER (24BIT, I/P RELAY COILS TO CAM 2,12-1, RELAY CONTACTS O/P)	CAM 8,02-2	METRIMPEX	2	/75	
	OPTOISOLATOR (24 INPUTS, OUTPUTS MAY BE CONNECTED TO CAM 2,05/CAM 2,09	CAM 8,09-1	METRIMPEX	2	/74	
	UNIVERSAL INPUT/OUTPUT REGISTER	9066	NUCL. ENTERPRISES	1	/75	
	16 BIT INPUT/OUTPUT REGISTER (O/P STAGES ON PLUGABLE PC, FP CONNECTOR)	IOR 2053	SEN	1	/74	(11)
	INPUT/OUTPUT REGISTER (24 BITS IN, 12 BITS OUT, OPTICALLY COUPLED)	IOR-1	JOERGER	1	/74	(11)

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPN
	INPUT/OUTPUT REGISTER (24BIT, INTEGRATED INPUT, OUTPUT STROBES, FULL LAM)	210	MYTEC	1	/75	
	DUAL INPUT DUAL OUTPUT REGISTER (16BIT, TTL IN, OPEN COLL TTL OUT, MAX 40MA,30V)	C110	RDT	1	/72	
	INPUT/OUTPUT REGISTER(2X24BIT IN,2X12BIT OUT, 3 ENTRY MODES, LED DISPLAY)	IR=1	JOERGER	1	/72	(7)
	BUFFER STORE/REGISTER (32X24BIT,WITH EXTERNAL ADDRESSING FACILITY)	104	MYTEC	1		
	(SAME, 32X24BIT, WITHOUT EXT ADDR)	100		1		
	(SAME, 32X16BIT, WITHOUT EXT ADDR)	101		1	/72	
	BUFFER STORE/REGISTER (32X16BIT, WITH EXTERNAL ADDRESSING FACILITY)	105	MYTEC	1		
	(SAME, 16X24BIT, WITHOUT EXT ADDR)	102		1	/72	
	(SAME, 16X16BIT, WITHOUT EXT ADDR)	103		1	/73	
	.143 PERIPHERAL INTERFACING MODULES (FOR TTY, TAPE ETC)					
N	TELETYPE INTERFACE (FOR 5 TRACK CCITT NO 2 CODE)	502	POLON	1	9/76	
N	TAPE READER INTERFACE (FOR CT 2000 SERIES TAPE READERS)	526	POLON	1	9/76	
N	PUNCH TAPE FAST READER CONTROL	JLB 20	SCHLUMBERGER	0	/76	
N	PUNCH TAPE FAST READER CONTROL	JLB 21	SCHLUMBERGER	2	/76	
N	FLOPPY DISC INTERFACE MODULE	JFD 10	SCHLUMBERGER	1	/76	
N	FLOPPY DISC SYSTEM (UP TO 4 DRIVES, IBM COMPATIBLE)	DS 67	SENSIUN	2	/76	
	INTERFACE FOR ASR33 TTY,SERIAL DATA LINK	6711	BI RA SYSTEMS	1	/74	
	TELETYPE INTERFACE FOR MODEL 72A	90	JORWAY	2	/71	
	SERIAL DRIVER/RECEIVER (TTY, TTX & MODEM INTERFACE, V24 CCITT STANDARD)	CAM 3,04	METRIMPEX	1	/76	
	TELETYPEWRITER INTERFACE(I/O DATA TRANSF AND CONTROL,LAM USED AS TWO-WAY FLAG)	7061-1	NUCL. ENTERPRISES	1	/70	(1)
	TELETYPE INTERFACE (FOR ASR 33, SER I/O)	500	POLON	1	/74	
	TERMINAL DRIVER	J TY 20	SCHLUMBERGER	1	/73	(11)
	VERSATEC LINE PRINTER INTERFACE	3320	KINETIC SYSTEMS	1	/72	
	INTERFACING OUTPUT UNIT(8BIT DATA, CONTR & STATUS REGS, FOR FACIT SP1 INTERFACE)	SP1/ACCEPTOR	ARGYCOM	1	/74	(12)
	PAPER TAPE PUNCH INTERFACE, COUPLES TO FACIT 4070,DATA DYNAMICS,RACAL DIGISTORE	TP 0801	GEC-ELLIOTT	1	/75	(1)
	INTERFACING INPUT UNIT (8BIT DATA/STATUS & CONTR REGS, FOR FACIT SP1 INTERFACE)	SP1/SOURCE	ARGYCOM	1	/74	(12)
	PAPER TAPE READER INTERFACE (COUPLES TO LINWOOD, TREND, & RACAL DIGISTORE)	TR 0801	GEC-ELLIOTT	1	/75	(1)
	MAGNETIC TAPE INTERFACE (TAPE DECKS OR CASSETTES)	CS 0042	NUCL. ENTERPRISES	1	/73	(8)
	PORTABLE CASSETTE DRIVER(FOR 1 CASSETTE)	P CK 10	SCHLUMBERGER		/75	
	UNIVERSAL ASYNCHRONOUS TRANSMITTER/RECEIVER (129 CHAR,BUFFER)	C 317	INFORMATEK	1	/73	
	PERIPHERAL READER(8BIT PARALLEL DATA IN, NEG OR POS TTL,HANDSHAKE CONTROLS)	7064-1	NUCL. ENTERPRISES	1	/71	(1)
	PERIPHERAL DRIVER (8BIT DATA OUT,NEG OR POS TTL,HANDSHAKE CONTROLS)	7065-1	NUCL. ENTERPRISES	1	/71	(1)
	.144 DISPLAY MODULES, DISPLAY AND PLOTTER INTERFACING					
N	SERIAL HIGHWAY DISPLAY-BIT,BYTE TO 5 MHZ 16BYTE MEM, 9BYTE DISPLAY DATAWAY READ,	77	JORWAY	2	/76	
N	DATAWAY DISPLAY (VISUAL,OF ALL LINES)	081	POLON	2	12/76	
N	LINEAR DISPLAY DRIVER (DRIVES UP TO 16 BURROUGHS 16 CHAR,OR 32 CHAR,DISPLAYS)	0369	SENSIUN	1	/76	
N	DATA-TV-CONTROLLER	75 5700/A	WEHRMANN	2	/75	
	DISPLAY UNIT (8CMX10CM CRT, INPUTS- X,Y- +5-5V, Z- 5V)	CAM 3,01	METRIMPEX	12	/73	
	DISPLAY DRIVER (FOR CAM 3,01)	CAM 3,02	METRIMPEX	3	/73	
	24 BIT DECIMAL DISPLAY (6 SYMBOLS 0,1, ...,9,A,B, ...,F)	CAM 3,08	METRIMPEX	1	/74	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	DECIMAL DISPLAY UNIT (ADDRESS AND 5 DATA DECADES + MULTIPLIER DISPLAYED)	9007	NUCL. ENTERPRISES	NA	/71	
	DISPLAY CONTROLLER (FOR 9007,INCLUDES BIN TO DECIMAL CONVERTER)	9006		2	/71	
	COLOUR DISPLAY INTERFACE	9062	NUCL. ENTERPRISES	NA	/75	(12)
	EXTERNAL DISPLAY FOR J EA 10 SCALER	C AE 10	SCHLUMBERGER	NA	/73	
	GRAPHIC DISPLAY DRIVER FOR HP1311/TEK604	4301	BI RA SYSTEMS	1	/74	
	GRAPHIC DISPLAY DRIVER FOR STORAGE DISPLAY TEK 602	4301A	BI RA SYSTEMS	2	/74	
	INTERACTIVE GRAPHICS DISPLAY PROCESSOR 128 CHARACTERS, 9X7 DOT MATRIX, 4 SIZES, VECTORS,ARCS,CIRCLES IN THREE LINE TYPES	DP 1603 DP 1603A	GEC-ELLIOTT	4 2	/75	
	LIGHT PEN & TRACKER BALL INPUTS, 32 CONTROL INSTRUCTIONS, BUILT IN 4K STORE,	DP 1603B		2		
	CRT DECIMAL DISPLAY SYSTEM (INCLUDING) DISPLAY DRIVER	72A 72A	JORWAY	NA 8	/71	(2)
	DISPLAY SYSTEM COMPRISING		KINETIC SYSTEMS		/71	(4)
	DISPLAY SYNCHRONIZING (COMPATIBLE WITH 60HZ 525 LINE MONITORS)	3200		1	/71	
	DISPLAY SYNCHRONIZING (COMPATIBLE WITH 50HZ 625 LINE MONITORS)	3200E		1	/74	(12)
	DISPLAY TIMING	3205		1	/71	
	DISPLAY CONTROL	3210		1	/71	
	DISPLAY REFRESH (ALPHANUMERIC + GRAPHS)	3212		1	/71	
	DUAL LIGHT PEN INTERFACE	3225		1	/72	
	PROGRAMMABLE DISPLAY SYSTEM	3232		4	/75	
	COLOR MONITOR - 12"	RGB 5500 M			/71	
N	COLOR MONITOR - 19"	RGB 5100			/70	
	STORAGE DISPLAY DRIVER	3260		1	/72	
	DISPLAY DRIVER (TWO 10BIT DAC,OUTPUT RANGE +5V TO -5V,TWO OPERATION MODES)	7011-2	NUCL. ENTERPRISES	2	/70	(1)
	STORAGE OSCILLOSCOPE (DRIVER FOR TEKTRONIX 611 OR 601,USED WITH 7011)	9028	NUCL. ENTERPRISES	1	/71	(2)
	SCOPE DISPLAY DRIVER MANUAL CONTROL OF J DD 10	J DD 10 MC 10	SCHLUMBERGER	2 NA	/73	(7)
	SCOPE DISPLAY DRIVER X-Y-Z (SYSTEM) STORAGE DISPLAY DRIVER FOR TEKTRONIX 611 OR 601 CHARACTER GENERATOR VECTOR GENERATOR LIGHT PEN FOR FDD 2012 OR CG 2018	FDD 2012 SDD 2015 CG 2018 VG 2028 LP 2035	SEN	1 1 1 1	/71 /71 /71 /71 /71	(1) (1) (1) (1)
	LIGHT PEN (INCLUDES TRIGGER SWITCH) LIGHT PEN PROCESSOR	EC397 EC396	SENSIUN	1	/75	
	PLOTTER DRIVER (2X10BIT, X,Y OUT +&- 2,5MV)	CAM 3,03	METRIMPEX	3	/73	
	PLOTTER DRIVER	J XY 10	SCHLUMBERGER	1	/73	(8)
	X-Y RECORDER DRIVER	XY 2074	SEN	1		(14)

,145 INSTRUMENTATION INTERFACING MODULES (DVM, SUPPLY CTR, STEPPING MOTOR DRIVERS, PULSE ANALYSER CTR)

N	READ-OUT MODULE FOR WIRE CHAMBERS	JCF 10	SCHLUMBERGER	1	/76	
	DUAL 15 CHANNEL SERIAL OUTPUT MODULE (STEPPER MOTOR CONTROLLER, TTL)	3101	BI RA SYSTEMS	2	/73	
	STEP MOTOR DRIVER (MAX 32768 STEPS,RATE, ROTATION AND START/STOP FULLY COMMANDED)	1161	BURER	1	/72	(3)
	STEPPING MOTOR CONTROLLER & DRIVER (ADJUSTABLE ACCEL/DECEL,TIME & MAX FREQ)	SMC	JOERGER	1	/74	(13)
	STEPPING MOTOR CONTROLLER, DUAL	3360	KINETIC SYSTEMS	1	/72	(4)
	STEPPING MOTOR CONTROLLER, ACCELERATING	3361	KINETIC SYSTEMS	1	/73	
	STEPPING MOTOR DRIVER SUPPLY FOR J CP 20	J CP 20 C APP 10	SCHLUMBERGER	1	/74 /74	(9)
	CONTINUOUS STEPPER CONTROL (65536 STEPS, POSITION/DIRECT,/SPEED/ACCELER, CONTROL)	C-ST-4	WENZEL ELEKTRONIK	2	/72	
	INCREMENTAL STEPPER CONTROL(65536 STEPS, POSITION/DIRECT,/SPEED/ACCELER, CONTROL)	C-ST-4-I	WENZEL ELEKTRONIK	2	/72	
	VARIABLE PULSE DURATION TRIAC OUTPUT MODULE	3701	BI RA SYSTEMS	2	/74	
C	TRIAC OUTPUT REGISTER (110V OR 220V AC) (BITS, 2 AMPS, ZERO VOLTAGE SWITCHING)	LT	JOERGER	1	/74	
	POWER SUPPLY CONTROLLER 12-BIT D/A CONV,	3158	KINETIC SYSTEMS	1	/73	
N	RELAY MULTIPLEXER (32-2 WIRE OR	3160	KINETIC SYSTEMS	1	/75	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	CAMAC-TO-SCIPP PHA INTERFACE	2323	BI RA SYSTEMS	2	/73	
	MULTICHANNEL ANALYZER - CAMAC INTERFACE (FOR PACKARD 9000 AND 900 SERIES MCA)	9701	PACKARD	3		(4)
	SYNCHRO TO DIGITAL CONVERTER (SINGLE AND MULTI-TURN CAPABILITIES)	SDC	JOERGER	2	/73	(13)
	DUAL SYNCHRO-DIGITAL CONVERTER (14BIT)	CS 0047	NUCL, ENTERPRISES	2	/73	
	DUAL INCREMENTAL POSITION ENCODER (2X20 BIT X-Y DIGITIZATION BY UP-DOWN COUNTER)	2IPE 2019	SEN	1	/71	
	INTERFACE FOR MEASURING DEVICES (DUAL INPUT FOR 2 INSTRUMENTS)	DO 200-1412	DORNIER	1	/74	(10)
	PULSE DURATION DEMODULATOR	3720	KINETIC SYSTEMS	1	/73	
	HIGH PERFORMANCE DIGITIZER (150MHZ WAVE)	WP 1051	TEKTRONIX	NA	/75	
	HIGH PERFORMANCE DIGITIZER (1GHZ TRANSI)	WP 2051	TEKTRONIX	NA	/75	
	HIGH PERFORMANCE DIGITIZER (1GHZ TRANSI)	WP 2052	TEKTRONIX	NA	/75	
	ADC/CAMAC INTERFACE (FOR ANY ADC,2X16BIT O/P BUFFER,STATUS,LAM HANDL,CLOCK TIME)	C-A1-2	WENZEL ELEKTRONIK	1	/73	(10)
	ISOLATED ON-OFF CONTROLLER FOR 16DEVICES 5 CONTROL-LINES/DEV.,1-SEC-FAILURE-TEST)	C-PC-16	WENZEL ELEKTRONIK	1	/75	(14)
	.147 OTHER DIGITAL I/O MODULES (INCL, DATA LINKS)					
	CAMAC DATA LINK MODULE (16 BIT PARALLEL,ASYNCHRONOUS DATA LINK)	6701	BI RA SYSTEMS	2	/73	
N	BISON-NET MEMORY MODULE	6720	BI RA SYSTEMS	2	/76	
N	BISON-NET TRANSMIT,-RECEIVE MODULE	6721	BI RA SYSTEMS	3	/76	
	BIT-SYNCHRONIZER - HARDWARE PROGRAMABLE 0 TO 10V INPUT, PCM-SIGNAL IN SERIES	DO 200-2291	DORNIER	3	/73	
	FORMAT-SYNCHRONIZER (IDENT & S/P OF DATA WORDS, SOFT- & HARDWARE PROGRAMMABLE)	DO 200-2260	DORNIER	4	/73	
	COMMUNICATION INTERFACE (V24/V23/V21 MODEM INTERFACE WITH AUTO-DIAL OPTION)	DO 200-2911	DORNIER	1	/73	(10)
	COMMUNICATION INTERFACE COMMUNICATION INTERFACE W/ BUFFER	3340 3340B	KINETIC SYSTEMS	1 1	/75 /75	
N	SYNCHRONOUS MODEM ADAPTER	3934	KINETIC SYSTEMS	1	/75	
	SERIAL DRIVER/RECEIVER (TTY, TTX & MODEM INTERFACE, V24 CCITT STANDARD)	CAM 3,04	METRIMPEX	1	/75	
	SERIAL INTERFACE (V24 SPEC, QUAD VERSION VARIABLE TRANSMISSION RATES)	9045	NUCL, ENTERPRISES	1	/73	(13)
	SERIAL INTERFACE (VARIABLE TRANSMISSION RATE)	9046	NUCL, ENTERPRISES	1	/75	
	START-STOP UNIT (START, STOP CLOCK AND GATE OUTPUTS)	J AM 10	SCHLUMBERGER	1	/71	
	FOUR FOLD BUSY DONE (START SIGNAL INITIATED BY COMMAND,DEVICE RETURNS LAM)	4BD 2021	SEN	1	/71	
	DATA TRANSMISSSION MODULE (50BD TO 9,6KB SYNC/ASYNC, V24, USE WITH 0326)	0350	SENSIUN	1	/75	
N	FAST SERIAL DATA LINK (5MHZ FULL DUPLEX)	0376	SENSIUN	1	/76	
	.15 DIGITAL HANDLING AND PROCESSING MODULES -- AND/OR/NOR GATES,FAN-OUTS,DIGITAL LEVEL AND CODE CONVERTERS,BUFFERS,DELAYS,ARITHM, PROCESSORS ETC					
N	CAMAC COMPATIBLE MICROCOMPUTER 8080 MICROCOMP, CAMAC CRATE, TTY SERIAL	C 506	RDT	2	9/76	
N	CAMAC & DIGITAL CASSETTE INTERFACED	C 506		2	9/76	
	.151 FAN-OUTS, AND/OR/NOT-GATES					
	FAN-OUT UNIT (2 ORED INPUTS PROVIDE 8 TRUE,2 COMPLEM OUTPUTS,NIM SIGNALS)	FU 0801	GEC-ELLIOTT	1	/71	
	NIM FANOUT (DUAL FOUR FOLD & COMPLEMENT, NIM DRIVER, -14MA INTO 50OHMS)	FON	JOERGER	1	/73	
	TTL FANOUT (DUAL FOUR FOLD & COMPLEMENT, TTL DRIVER, 50MA CURRENT SINK)	FOT	JOERGER	1	/73	(14)
	NIM FANOUT (7-ORED INPUTS, 8 O/P+2 COMPL O/P GATED FROM DATAWAY)	216	JORWAY	1	/75	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	FAN OUT MODULE (IL2 I/P, 16 IL2 O/P)	9050	NUCL. ENTERPRISES	1	/73	
	SIX-FOLD CONTROLLED GATE (INDIV GATING, FAN-IN AND FAN-OUT CONTROLLED BY 3 REGS)	6CG 2017	BEN	1	/71	(4)
	FAST LOGIC UNIT (4X4 NIM INPUTS)	FLU 2062	BEN	1		(12)
N	INPUT READER 256 BITS(16X16 FORMAT)	9067	NUCL. ENTERPRISES	2	9/76	
	.152 DIGITAL LEVEL CONVERTERS					
	6 CHANNEL TTL/NIM CONVERTER	5601	BI RA SYSTEMS	1	/73	
	6 CHANNEL NIM/TTL CONVERTER	5602	BI RA SYSTEMS	1	/73	
	HEX CONVERTER (NIM TO TTL LEVELS PLUS TWO COMPLEMENT OUTPUTS)	CNT	JUERGER	1	/73	(14)
	HEX CONVERTER (TTL TO NIM LEVELS PLUS TWO COMPLEMENT OUTPUTS)	CTN	JUERGER	1	/73	(14)
	HEX IL1 TO IL2 CONVERTER (6 TTL SIGNALS IN,6 NIM SIGNALS OUT)	7052-1	NUCL. ENTERPRISES	1	/70	
N	UNIVERSAL LEVEL CONVERTER	9065	NUCL. ENTERPRISES	1	8/76	
	.153 CODE CONVERTERS					
	DECIMAL INPUT 6 NUMBERS 3 DIGITS CODE CONVERTER	DO 200-2005	DORNIER	2	/74	
	(SAME BUT 3 NUMBERS)	DO 200-2006		2	/74	
	CAMAC BCD-TO-BINARY CONVERTER	LEM-52/5,7	EISENMANN	1		
	CAMAC BINARY-TO-BCD CONVERTER WITH DECIMAL DISPLAY	LEM-52/5,8	EISENMANN	1		
	GRAY CODE TO BCD CONVERTER (DUAL CHANNEL INPUT WITH MEMORY)	EIR	JUERGER	1	/74	
N	BYTE SERIAL ADAPTER	958	KINETIC SYSTEMS	NA	/76	
	BINARY CODE CONVERTER(BIN-BCD OR BCD-BIN CONVERSION, DATA FROM DATAWAY OR FRONT)	9044	NUCL. ENTERPRISES	1		(7)
	BINARI TO DECIMAL CODE CONVERTER (24BIT BINARY TO 8 DECADES)	610A	POLON	1	/74	
N	BINARY TO BCD CONVERT. WITH DISPLAY (24BIT TO 8 DECADES)	612	POLON	2	10/76	
	BINARY TO BCD-CONVERTER(24BIT TO 8 DECADE,DISPLAY,CONV 40SEC,TTL LEVEL OUT,10M)	C-BWC-24	WENZEL ELEKTRONIK	2	/71	
	.154 BUFFER MEMORIES, STORAGE UNITS					
	PROGRAM STORE/REGISTER (256X24BIT RAM + 64X24BIT ROM, EXT ADDR, USE WITH 7036-2)	110A	HYTEC	1		
	(SAME BUT WITHOUT EDIT ROM)	110		1		
	(SAME BUT NO BUFFER AND NO EXT ADDR)	112		1	/73	
	1024 WORD 24 BIT STATIC STORE (NORMAL & BYTE MODES, CLEAR, INCR, DECR, READ, & OVERWRITE ON ADDRESS REG ARE PERFORMED)	130	HYTEC	1	/75	
	(SAME WITH MEMORY ACCESS ALSO FROM FRONT PANEL, MASTER/SLAVE OPERATION)	131		2	/75	
	3-DECADE ADC & 16-WAY MUX (PRESET X1-X10 AMPL, 16X24 STORE, 100USEC/CH UPDATE)	500-1	HYTEC	1	/73	
	(SAME AS 500-1 BUT WITH 8-WAY MUX)	502		1	/74	
	(SAME BUT BINARY ADC)	501		1	/74	
	(SAME AS 501 BUT WITH 8-WAY MUX)	503		1	/74	
	(SAME, BUT AMPL GAIN CAN BE SET AND STORED INDIVIDUALLY/CHANNEL, BCD/BIN)	510		2	/74	
	256 WORD FIFO BUFFER (24 BITS PER WORD)	3841	KINETIC SYSTEMS	1	/75	(13)
	4096 WORD 16 BIT STORE	90618	NUCL. ENTERPRISES	2	/75	
	256 WORDS OF 24 BIT STORE MODULE	CS 0018	NUCL. ENTERPRISES	1	/72	(7)
	PROGRAMMABLE READ ONLY MEMORY (32 WORDS, 18 BITS)	221	POLON	1	/75	
N	1K CORE MEMORY (24BIT,2US CYCLE TIME)	201	POLON	3	9/76	
N	4K CORE MEMORY (24BIT,2US CYCLE TIME)	204	POLON	3	9/76	
	BUFFER MEMORY (256 16BIT WORDS, USE WITH J CAN 21/C/M)	J MT 20	SCHLUMBERGER	1	/72	
N	BUFFER MEMORY (256X16BIT WORDS,I/O MODE)	JMT 30	SCHLUMBERGER	1	/76	
N	BUFFER MEMORY FOR DATA LOGGER (256 X 16 BIT WORDS)	JTR 10	SCHLUMBERGER	1	/76	
	SPECTRUM MEMORY	F81-4663/CD	WEHRMANN	1	/75	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELAY	NPR
	.155 LOGIC AND ARITHMETIC PROCESSING MODULES					
	FLOATING POINT ARITHMETIC INTERFACE (FOR USE WITH M 128 HARD. FLOAT. POINT)	C 327	INFORMATEK	1	/73	
	MICROPROCESSOR MODULE (FOR FAST ASSY. OF SPECIAL INTERFACES ETC. 8080 BASED)	0326	SENSIUN	1	/75	
C	96 CHAN. DRIFT CHAMBER TDC (.25US-1US F.S.,8BIT, 40 DEEP BUFFER, DIFF.I/P)	2770A	LRS-LECROY	2	/75	
	128 CHAN.MWPC ENCODER (RECEIVER, DELAY, LATCH, ENCODER, 80 HIT BUFFER,DIFFI/P)	2720	LRS-LECROY	2	/75	
	.16 ANALOGUE MODULES --ADC,DAC,MULTIPLEXERS,AMPLI-FIERS,LINEAR GATES,DISCRIMINATORS ETC					
	.161 ANALOGUE INPUT MODULES (DC AND PULSE ADC, TDC)					
	32 CHANNEL ANALOG DATA SYSTEM (EXPANDABLE WITH ADDITIONAL MUX MODULES)	5301	BI RA SYSTEMS	2	/74	
N	16 CHANNEL A/D CONVERTER, DIFF. INPUTS, 30US CONVERSION, 12 BITS PROGRAM. GAIN, INT. MEMORY	AM-F	JOERGER	1	3/76	
	A/F CONVERTER	CAM 4.13	METRIMPEX	1	/73	
N	512 CHANNEL ADC (PULSE,+5V OR +10V, RANGE, 50 MHZ CLOCK)	711	POLON	2	5/76	
N	FAST 12BIT A/D CONVERTER	JCANR 10	SCHLUMBERGER	2	/76	
N	ANALOG DIGITAL CONVERTER	ADC	WEHRMANN	1	/76	
	ANALOG INPUT (DUAL SLOPE ADC, +/-16V RANGE,14BITS/16V+SIGN,0.2SEC CONVERSION)	DO 200-1021	DORNIER	1	/72	
	ANALOGUE TO DIGITAL INTEFACE (WITH PLUG-IN CONVERTER CARDS ADC/8Q, ADC/10Q AND ADC/12Q FOR 8, 10 AND 12 BIT CONVERSION)	ADC 1201	GEC-ELLIOTT	1	/71	(1)
	16 CHANNEL, SCANNING A/D CONVERTER	3510	KINETIC SYSTEMS	1	/74	
N	16 CHANNEL,SCANNING A/D CONVERTER	3512	KINETIC SYSTEMS	1	/76	
	INTEGRATING A/D CONVERTER (ISOLATED I/P INTEGR TIME 1S/.1S/.02S, RANGE .03 - 5V)	CAM 4.06-2	METRIMPEX	3	/74	
	VOLTAGE - FREQUENCY CONVERTER (USED WITH MULTIPLEXERS J MX 10/20)	J CTF 10	SCHLUMBERGER	2	/73	
	UP-DOWN SCALER/FREQUENCY METER	J EF 10		1	/73	
	DUAL DIGITAL VOLTMETER (+AND- 0.1V, 10 BIT, DIFFERENTIAL INPUT)	2DVM 2013	SEN	1	/71	
	DIG. VOLTMETER (12BIT + SIGN, POT-FREE RANGES--AC/DC .02V - 20V,DC 5-100MA)	C 76451-A13-A1	SIEMENS	2	/73	
	DIGITAL VOLTMETER (SAME AS TYPE C 76451-A13-A1 WITH DISPLAY)	C 76451-A13-A2	SIEMENS	2	/73	
	ANALOG INPUTS (MULTIPLEXER-ADC, 8 DIFF I/P,+/-10V RANGE,7BITS/10V+SIGN)	DO 200-1013	DORNIER	2	/72	
	(SAME FOR +/-5V RANGE, 7BITS/5V+SIGN)	DO 200-1016		2	/72	
	(SAME FOR +10V RANGE, 8BITS/10V)	DO 200-1019		2	/72	
	DORNIER MODULES ALSO MARKETED BY SIEMENS		SIEMENS			
	ANALOG INPUT (ADC, +/-10V RANGE, 7BITS/10V+SIGN)	DO 200-1027	DORNIER	2	/72	
	(SAME FOR +/-5V RANGE, 7BITS/5V +SIGN)	DO 200-1028		2	/72	
	(SAME FOR +10V RANGE, 8BITS/10V)	DO 200-1029		2	/72	
	DUAL 10 BIT ANALOG TO DIGITAL CONVERTER	3515D	KINETIC SYSTEMS	1	/73	
	SINGLE 10BIT ANALOG TO DIGITAL CONVERTER	3515S	KINETIC SYSTEMS	1	/74	
	DUAL SLOPE ADC (+AND- 0.01/1/10V RANGES, 11BIT RESOLUTION,20MS CONV TIME)	1241	BORER	2	/72	(3)
	SUCCESS. APPROX. ADC (WITH S+H, +/-5V OR 0 TO +/-10V, 10-BIT,20/11 USEC ACCESS)	1243/1243A	BORER	2	/72	(9)
	SUCCESS. APPROX. ADC (WITH S+H, +/-5V OR 0 TO +/-10V, 12-BIT,23/13 USEC ACCESS)	1244/1244A	BORER	2	/73	(9)
	ANALOG INPUTS (MULTIPLEXER-ADC, 8 DIFF I/P,+/-10V RANGE,11BITS/10V+SIGN)	DO 200-1003	DORNIER	2	/72	
	(SAME FOR +/-5V RANGE, 11BITS/5V+SIGN)	DO 200-1006		2	/72	
	(SAME FOR +10V RANGE, 12BITS/10V)	DO 200-1009		2	/72	
	ANALOG INPUT (ADC, +/-10V RANGE, 11BITS/10V+SIGN)	DO 200-1024	DORNIER	2	/72	
	(SAME FOR +/-5V RANGE,11BITS/ 5V+SIGN)	DO 200-1025		2	/72	
	(SAME FOR +10V RANGE,12BITS/10V)	DO 200-1026		2	/72	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	3-DECADE ADC & 16-WAY MUX (PRESET X1-X10 AMPL, 16X24 STORE, 100USEC/CH UPDATE)	500-1	HYTEC	1	/73	
	(SAME AS 500-1 BUT WITH 8-WAY MUX)	502		1	/74	
	(SAME BUT BINARY ADC)	501		1	/74	
	(SAME AS 501 BUT WITH 8-WAY MUX)	503		1	/74	
	(SAME, BUT AMPL GAIN CAN BE SET AND STORED INDIVIDUALLY/CHANNEL, BCD/BIN)	510		2	/74	
	16-CHANNEL A/D CONVERTER (DIFFERENTIAL INPUTS, 11 BITS + SIGN)	AM-1	JOERGER	2	/74	(11)
	16-CHANNEL A/D CONVERTER (ACCEPTS 4-20MA CURRENT INPUTS, 11 BITS)	AM/I	JOERGER	2	/75	
	A/D CONVERTER (12BIT,MAX 40 USEC CONVERSION, +AND-5V, +AND-10V, +10V RANGES)	30	JORWAY	2	/71	(2)
	16 CHANNEL A/D CONVERTER (FET MUX DIFF INPUTS, 12BIT AUTO CYCLING, DUAL SLOPE)	34	JORWAY	2	/74	
	DUAL 12 BIT ANALOG TO DIGITAL CONVERTER	35200	KINETIC SYSTEMS	1	/73	
	SINGLE 12BIT ANALOG TO DIGITAL CONVERTER	35208	KINETIC SYSTEMS	1	/74	
	INSULATED ADC (12BITS, 100 USEC, 10MV, FULL SCALE, 300V COMMON MODE)	IADC 2069	SEN	2		(14)
	DIGITAL VOLTMETER (19,999MV TO 1999,9V)	9068	NUCL, ENTERPRISES	2		(13)
	SUCCES, APPROX, 16 BIT ADC (+8-10V, 5MS CONVERSION TIME, INPUT PROTECTION)	0324	SENSIUN	2	/75	
	12-CHANNEL ADC (12 FAST I/P, 10BIT/CH, .25PC SENSITIVITY, FAST CLEAR)	2249A	LRS-LECROY	1	/74	(9)
	12-CHANNEL PEAK ADC (10BIT/CH, -8V FULL SCALE, FAST CLEAR, COMMON GATE)	2259	LRS-LECROY	1	/75	(13)
N	12-CH, FAST CONV,QUADRATIC ADC (9BIT/9US 32-DEEP BUFFER,1/4 PC SENS,0-248 PC)	2250Q	LRS-LECROY	1	1/76	
N	12-CH, FAST CONV,LINEAR ADC (9BIT/9US 32-DEEP BUFFER,1/2 PC SENS,0-248 PC)	2250L	LRS-LECROY	1	1/76	
N	TRANSIENT RECORDER (8BIT,,1-20MHZ, 1024 SAMPLES,+/-,25V F,S,,PRESAMPLING)	2256	LRS-LECROY	2	9/76	
	OCTAL ADC (MIN 5 NSEC PULSES, POS OR NEG 8BIT/100 PC RESOLUTION, 250 USEC CONV)	9040	NUCL, ENTERPRISES	1	/72	(4)
	ANALOGUE TO DIGITAL CONVERTER (80MHZ, 12 BITS)	9060	NUCL, ENTERPRISES	1	/74	(10)
	16,000 CHANNEL PULSE ADC (200MHZ CLOCK)	J CAN 21 C/H	SCHLUMBERGER	6	/72	(6)
	1024 CHANNEL PULSE ADC (100MHZ CLOCK)	J CAN 40	SCHLUMBERGER	2	/72	(6)
	FAST ADC(10 & 12BIT VERSIONS,WITH SAMPLE AND HOLD, CONV TIME 2USEC/4,5USEC)	FADC 2067	SEN	2		(12)
	FAST DUAL ADC (DATA AS FOR 2067)	2 FADC 2068		2		(12)
	EVENT TIMER(4-CHANNEL TIME DIGITIZER, 8B 100MHZ INT, CLOCK, LAM WHEN DONE)	2205	BI RA SYSTEMS	1	/74	
C	QUAD CAMAC SCALER (4X16BIT OR 2X32BIT, 40 MHZ)	1004	BORER	1	/76	
C	QUAD CAMAC SCALER (4X16BIT OR 2X32BIT, 100 MHZ	1004A	BORER	1	/75	
	TIME DIGITIZER (4X16BIT,50MHZ CLOCK,WITH CENTRE FINDER, USABLE WITH PRESAMP 611)	1005	BORER	1	/72	
	TIME DIGITIZER (6 CHANNELS,16 BITS, 100 MHZ CLOCK RATE)	TD	JOERGER	1	/74	(11)
	OCTAL TIME-TO-DIGITAL CONVERTER(10BIT/CH 102/204/810 NSEC RANGES, FAST CLEAR)	2228	LRS-LECROY	1	/74	(9)
	96 CHAN, DRIFT CHAMBER TDC (,5US-1US LATCH, ENCODER, 80 BIT BUFFER,DIFFI/P)	2770	LRS-LECROY	2	/75	
C	128 CHAN,MHPC ENCODER (RECEIVER, DELAY, F,S,,8BIT, 40 DEEP BUFFER, DIFF,I/P)	2720	LRS-LECROY	2	/75	
	A/D CONVERTER (11BIT + SIGN OR 12, CONV TIME 30USEC, RANGE +5-8V, INTERNAL S&H)	CAM 4,05	METHIMPEX	2	/72	
	TIME DIGITIZER(4X16BIT,CLOCK RATE 70/85MHZ, WITH CENTER FINDING LOGIC)	TD 2031	SEN	1	/72	
	TIME DIGITIZER (4X16BIT,CLOCK RATE 70/85MHZ,NIM LEVELS)	TD 2041	SEN	1	/72	(4)
	SERIAL TIME DIGITIZER (8X8BIT 100MHZ, SER + SEQUENT COUNT MODE,SHIFT-REG GATE)	STD 2050	SEN	1	/72	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	.162 ANALOGUE OUTPUT MODULES (DAC)					
	8 CHANNEL 8 BIT D/A CONVERTER (CURRENT OR VOLTAGE O/P,SLOW ANALOG METER DRIVER)	5405	BI NA SYSTEMS	1	/73	
	ANALOG OUTPUT (DAC, +10V O/P RANGE, 5MA, 8BIT RESOLUTION, SINGLE O/P)	DO 200-1511	DORNIER	1	/73	
	(SAME WITH 12BIT RESOLUTION, SINGLE O/P)	DO 200-1521		1	/73	
	(SAME WITH 8BIT RESOLUTION, DUAL O/P)	DO 200-1512		1	/73	
	(SAME WITH 12BIT RESOLUTION, DUAL O/P)	DO 200-1522		1	/73	
	(SAME WITH 8BIT RESOLUTION, QUAD O/P)	DO 200-1517		1	/73	
	(SAME WITH 12BIT RESOLUTION, QUAD O/P)	DO 200-1527		1	/73	
	ANALOG OUTPUT (DAC,+&-10V O/P RANGE,5MA, 8BIT RESOLUTION, SINGLE O/P)	DO 200-1513	DORNIER	1	/73	
	(SAME WITH 12BIT RESOLUTION, SINGLE O/P)	DO 200-1523		1	/73	
	(SAME WITH 8BIT RESOLUTION, DUAL O/P)	DO 200-1514		1	/73	
	(SAME WITH 12BIT RESOLUTION, DUAL O/P)	DO 200-1524		1	/73	
	(SAME WITH 8BIT RESOLUTION, QUAD O/P)	DO 200-1518		1	/73	
	(SAME WITH 12BIT RESOLUTION, QUAD O/P)	DO 200-1528		1	/73	
	ANALOG OUTPUT (DAC, +&-5V O/P RANGE,5MA, 8BIT RESOLUTION, SINGLE O/P)	DO 200-1515	DORNIER	1	/73	
	(SAME WITH 12BIT RESOLUTION, SINGLE O/P)	DO 200-1525		1	/73	
	(SAME WITH 8BIT RESOLUTION, DUAL O/P)	DO 200-1516		1	/73	
	(SAME WITH 12BIT RESOLUTION, DUAL O/P)	DO 200-1526		1	/73	
	(SAME WITH 8BIT RESOLUTION, QUAD O/P)	DO 200-1519		1	/73	
	(SAME WITH 12BIT RESOLUTION, QUAD O/P)	DO 200-1529		1	/73	
	DORNIER MODULES ALSO MARKETED BY SIEMENS		SIEMENS			
	OCTAL DAC (10BIT,0-5V,500HMS,10USECS)	DAC 1082	GEC-ELLIOTT	1	/73	
	(SAME BUT WITH 2'S COMPLEMENT 9BIT+SIGN, +AND- 5V, 500HMS)	DAC 1082(B)		1	/73	
	QUAD DAC (4 CHANNEL VERSION OF DAC 1082)	DAC 1042	GEC-ELLIOTT	1	/74	
	(SAME, 4 CHANNEL VERSION OF DAC 1082(B)	DAC 1042(B)		1	/74	
	DUAL 12 BIT DAC (+/- 10V OR +/- 5V O/P, FOR X-Y DISPLAY DRIVE)	550	HYTEC	1	/75	
	DUAL D/A CONVERTER (12 BIT, 30USEC CONV TIME, +10V, +AND-10V, +AND-5V RANGES)	D/A-12	JOERGER	1	/73	(13)
	OCTAL D/A CONVERTER (8BIT RESOLUTION, 0 TO 2MA OR 0 TO +10V OUT)	8 D/A	JOERGER	1	/73	(13)
N	D/A CONVERTER, 16 BITS, DUAL OR SINGLE CHANNEL, +&-10V OR +10V OUTPUTS,	D/A-16	JOERGER	1	8/76	
N	DIGITAL TO SYNCHRO CONVERTER, 14 BIT RESOLUTION, 60 HZ OR 400 HZ,	DSC	JOERGER	2	8/76	
	D/A CONVERTER (12BIT,5 USEC CONVERSION, O/P RANGES +AND-2,5V/5V/10V AND +5V/10V)	31	JORWAY	1	/71	(8)
	8 CHANNEL 10 BIT D-A CONVERTER	3110	KINETIC SYSTEMS	1	/72	
N	8 CHANNEL 12 BIT D/A CONVERTER	3112	KINETIC SYSTEMS	1	/76	
	DIGITAL TO ANALOG CONVERTER (12BIT, CONV TIME 10USEC, O/P RANGE 0 TO 5V, MAX 5MA)	CAM 4,10	METRIMPEX	1	/72	
	DIGITAL TO ANALOG CONVERTER (4X10BIT, TIME 10USEC, O/P RANGE +&-5V, MAX 5MA)	CAM 4,11	METRIMPEX	2	/74	
N	MULTI-DAC 12 CHANNEL 12 BIT	9085	NUCL. ENTERPRISES	1	10/76	
	DUAL DIGITAL-TO-ANALOG CONVERTER (10BIT, OUTPUT 0 TO +10V OR -5 TO +5V)	2DAC 2011	SEN	1	/71	
	DUAL DAC (12BIT, +AND-10V OR +AND-20MA)	C 79451-A15-A4	SIEMENS	1	/73	
N	DIGITAL ANALOG CONVERTER (12BIT, 3 POT)	DAC	WEHRMANN	2	/75	
	ISOLATED DUAL DAC (10BIT,30USEC,10V/5MA, OPTOCOUPLER,4 TIMING MODES,RANGE-MODIF)	C-DA-210	WENZEL ELEKTRONIK	1	/74	
	QUAD DAC (8BIT,10USEC,5V/50MA,4TIMING-M, +,- &RANGE MODIF,OPT.GROUND-REJ&.5USEC)	C-DA-408	WENZEL ELEKTRONIK	1	/74	(11)
	QUAD DAC(10BIT,10USEC,5V/50MA,4TIMING-M, +,- &RANGE MODIF,OPT.GROUND-REJ&.5USEC)	C-DA-410	WENZEL ELEKTRONIK	1	/74	(11)
	.164 ANALOGUE HANDLING AND PROCESSING MODULES I (MX)					
	SEE ALSO DORNIER ADC TYPES		DORNIER			
N	SOLID STATE ANALOG MULTIPLEXER,32 SINGLE ENDED INPUTS OR 16 DIFFER,, EXPANDABLE	AMS	JOERGER	1	6/76	
N	16 CHANNEL FET MULTIPLEXER	JMR 10	SCHLUMBERGER	1	/76	
N	MANUAL CONTROL	JAR 10	SCHLUMBERGER	1	/76	
	MULTIPLEXER CONTROL UNIT (UP TO 7 CAM 4,08-21 /R CAM 4,08-22)	CAM 4,08-1	METRIMPEX	1	/74	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	12 INPUT ANALOGUE MULTIPLEXER (RANDOM OR SCAN ACCESS CONTROLLED BY SKIP REGISTER)	MX 2025	SEN	1	//2	(6)
	12-CHANNEL ANALOGUE MULTIPLEXER (FET, 5 USEC SWITCHING TIME, +/-10V)	MX 2070	SEN	1		(13)
	WIDE-BAND ROUTER (12-CHANNEL 50 OHMS ANALOGUE MULTIPLEXER)	WBR 2073	SEN	1		(13)
	15 CHANNEL MULTIPLEXER (ANALOGUE SIGNALS ROUTED TO ADC/DVM,DIRECT + SCAN MODES)	1701	BORER	1	//2	(3)
	RELAY MULTIPLEXER(16 CHANNELS,MAX 200V/ 500MA OR 10VA, DATAWAY SET+INCR,ADDRESS	DU 200-1236	DORNIER	1	//2	
	WITH FRONT PANEL CONNECTOR	DU 200-1236		1	//2	
	(SAME WITH LOW THERMO VOLTAGE CONTACTS)	DU 200-1235		2	//1	
	ANALOG MULTIPLEXER (15 CHANNELS,REED RELAYS,MAN AND DATAWAY SEL, EXPANDABLE)	AM	JOERGER	2	//2	(6)
	16-CHANNEL A/D CONVERTER (DIFFERENTIAL INPUTS, 11 BITS + SIGN)	AM-1	JOERGER	2	//4	(11)
	16-CHANNEL A/D CONVERTER (ACCEPTS 4-20MA CURRENT INPUTS, 11 BITS)	AM/I	JOERGER	2	//5	
	15 CHANNEL RELAY MULTIPLEX	3530P	KINETIC SYSTEMS	2	//3	
	15 CHANNEL RELAY MULTIPLEXER	3530L	KINETIC SYSTEMS	2	//5	
	MASTER MULTIPLEXER (16 CH, 4 POLE REED)	601	NUCL, ENTERPRISES		//0	
	SLAVE MULTIPLEXER (16 CH, 4 POLE REED)	600			//0	
N	RELAY MULTIPLEXER 64 WAY	9024	NUCL, ENTERPRISES	NA	10//6	
	16 CHANNEL RELAY MULTIPLEXER STANDARD LEVEL)	J MX 10	SCHLUMBERGER	1	//3	
	(SAME FOR LOW LEVEL)	J MX 20		1	//3	
	MULTIPLEXER 16X4 CONTACTS			1	//4	
	16-CHANNEL FAST MULTIPLEXER (FET SWITCHES FOR ADC 1243 AND 1244)	1704	BORER	1	//8	(4)
	FET MULTIPLEXER (16 CHANNELS, MAX +OR-10V,DATAWAY SET+INCR,ADDRESS)	DU 200-1231	DORNIER	1	//2	
	WITH FRONT PANEL CONNECTOR	DU 200-1231		1	//2	
	FET MULTIPLEXER (16 DIFF I/P, MAX +OR-10V,DATAWAY SET+INCR,ADDRESS)	DU 200-1234	DORNIER	1	//2	
	WITH FRONT PANEL CONNECTOR	DU 200-1234		1	//2	
	16 CHANNEL A/D CONVERTER (FET MUX DIFF INPUTS, 12BIT AUTO CYCLING, DUAL SLOPE)	34	JORWAY	2	//4	
	16 CHANNEL FAST DIGITAL MULTIPLEXER (PULSE WIDTH MIN 7 NSEC)	CAM 6,03	METRIMPEX	2	//4	
	16 CHANNEL MULTIPLEXER (SWITCHING OF 3 WIRES, MAX 500HZ, MAX 100V)	CAM 4,08-21	METRIMPEX	2	//4	
	16 CHANNEL MULTIPLEXER (SWITCHING OF 4 WIRES, MAX 500HZ, MAX 100V)	CAM 4,08-22	METRIMPEX	2	//4	
	MULTIPLEXER-SOLID STATE (16 SINGLE-ENDED OR 8 DIFF CHAN,RANDOM OR SEQUENT ACCESS)	9026	NUCL, ENTERPRISES	1	//1	
	32 CHANNEL ANALOG MULTIPLEXER (SERVE AS CHANNEL EXPANDER FOR 5301 DATA SYSTEM)	5101	BI HA SYSTEMS	1	//4	
	32 CHANNEL ANALOG MULTIPLEXER (MAX 100KHZ, MAX +&-5V IN)	CAM 4,07	METRIMPEX	1	//3	
C	RELAY MULTIPLEXER (32-2 WIRE OR 16-3 WIRE CHANNELS)	750	POLON	2	//5	
	MULTIPLEXER (32 CHANNEL, 2 CONTACTS)	C 76451-A4-A1	SIEMENS	2	//3	
	MULTIPLEXER (32 CHANNEL, 4 CONTACTS)	C 76451-A4-A2	SIEMENS	2	//3	
	MULTIPLEXER 32X2 CONTACTS	C 72468-A0628-A001	SIEMENS	1	//4	
	FET MULTIPLEXER (32 CHANNELS, MAX +OR-10V,DATAWAY SET+INCR,ADDRESS)	DU 200-1232	DORNIER	1	//2	
	WITH FRONT PANEL CONNECTOR	DU 200-1232		1	//2	
	FET MULTIPLEXER (32 DIFF IOP, MAX +OR-10V,DATAWAY SET+INCR,ADDRESS)	DU 200-1237	DORNIER	2	//2	
	WITH FRONT PANEL CONNECTOR	DU 200-1237		2	//2	
	FET MULTIPLEXER (64 CHANNELS, MAX +OR-10V,DATAWAY SET+INCR,ADDRESS)	DU 200-1261	DORNIER	2	//3	
	WITH FRONT PANEL CONNECTOR	DU 200-1261		2	//3	

.165 ANALOGUE HANDLING AND PROCESSING MODULES II (LIN, GATES, AMPL., DISCRIMINATORS ETC)

PREAMPLIFIER (GAIN RANGES- X10, X30, X100, X300)	CAM 4,15	METRIMPEX	3	//2	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPH
	FILTER AMPLIFIER (GAIN RANGE=- OFF, X1, X10)	CAM 4,16	METRIMPEX	3	/72	
C	ACTIVE FILTER AMPLIFIER(10=1900V/V GAIN, .25=1USEC GAUSS,PULSE SHAPING,0=10V OUT	1101	POLON	3	/74	
	BASELINE RESTORER(,1% COUNT RATE STABIL UP TO 50KHZ,0=10 I/O SIGNALS,1V/V GAIN)	1102	POLON	2	/74	
	DELAY AMPLIFIER(.25 = 4,75USEC DELAY, 0 TO 10V IN/OUT SIGNALS, 1V/V GAIN)	1103	POLON	2	/75	
	SUM=INVERT AMPLIFIER(.2% NON=LINEARITY, 1V/V GAIN, 0 TO 10V IN/OUT SIGNALS)	1104	POLON	1	/74	
	LINEAR GATE (.2% NON=LINEARITY, +/= 1V/V GAIN, 0 TO 10V IN/OUT SIGNALS)	1105	POLON	1	/73	
	PULSE STRETCHER(.05=.9USEC I/P WIDTH, 1USEC O/P WIDTH OF PULSES, .9 V/V GAIN)	1106	POLON	1	/74	
	SINGLE CHANNEL ANALYSER (.2=10V LO/HI LEVEL, .2=2V WINDOW, .5=2,5USEC DELAY)	1201	POLON	3	/74	
	LINEAR RATEMETER (10 TO 100KCPS RANGE, 1SEC TO 30SEC TIME CONSTANTS)	1301A	POLON	3	/74	
	LOGIC SHAPER AND DELAY (.2 TO 110USEC DELAY, .2 TO 1%USEC O/P PULSE WIDTH)	1401	POLON	2	/74	
	UNIVERSAL COINCIDENCE (.1 TO 2USEC RESOLVING TIME)	1402	POLON	2	/74	
	FAST AMPLIFIER (200V/V GAIN, 10NS RISE TIME, 200NS TC DIFF, 200NS TC INTEGR)	1501	POLON	3	/75	
	FAN OUT (1 NIM IN, 2 NIM & 1 COMPL TTL OUT)	1504	POLON	1	/73	
C	DETECTOR BIAS SUPPLY (TO +/=2000V, 1MOHM AND 10MOHM OUTPUT RESISTANCE	1901	POLON	4	/74	
N	CHARGE PREAMPLIFIER (2,8 KEV, 0,03KEV/PF NOISE FOR GE)	1001	POLON		/76	
N	CHARGE PREAMPLIFIER (1,3 KEV, 0,03KEV/PF NOISE FOR GE)	1002	POLON		/76	
N	SCINTILLATION PREAMPLIFIER (6,10=8C GAIN 0,1% NONLINEARITY,50USEC DECAY TIME)	1003	POLON	1	0/76	
N	FAST DISCRIMINATOR (=0,15V TO =1V DISC. LEVEL, 0,8% NONLINEARITY)	1502	POLON	1	/75	
N	CONSTANT REACTION DISCRIMINATOR (0,05 TO 0,3 FRACTION, 50MV IN, SENSITIVITY)	1503	POLON	2	7/76	
N	NANOSECOND DELAY (2,5NS TO 66NS DELAY)	1506	POLON	2	/75	
N	ANTI=COINCIDENCE /DISCRIMINATOR	JDC 10	SCHLUMBERGER	1	/76	
N	1 X 16 CHANNEL FAN OUT	JFO 10	SCHLUMBERGER	1	/76	
N	2 X 5 CHANNEL FAN OUT	JFO 20	SCHLUMBERGER	1	/76	
N	MANUAL DELAY	JMD 10	SCHLUMBERGER	1	/76	
	CAMAC CONTROLLED PULSE SHAPER (4 PM I/P, 4 NIM I/P & 6 NIM O/P)	CPS 2065	SEN	1		(12)
	SAMPLE=AND=HOLD AMPLIFIER (DUAL DIFF AMPL,+/=10V RANGE,20MA OUT,5USEC SETTL)	DU 200=1040	DORNIER	2	/73	
	(SINGLE AMPL VERSION, BOTH TYPES HAVE HOLD AND TRACK MODES)	DU 200=1041		2	/73	
	PROGRAMABLE AMPLIFIER/ATTENUATOR (GAIN 0DB TO 60DB IN 10 STEPS, ATTENUATION ,5)	DU 200=1052	DORNIER	2	/73	
	(SAME BUT DUAL CHANNEL VERSION)	DU 200=1053		1	/73	
	PROGRAMMABLE AMPLIFIER (GAIN 1, 10, 100, 1000)	DU 200=1054	DORNIER	1	/75	
	(SAME BUT DUAL CHANNEL VERSION)	DU 200=1055		1	/75	
	PROGRAMMABLE PRESISION ATTENUATOR (1/1 TO 1/2048, 20V MAX I/P RANGE)	PPA 2071	SEN	1		(13)
	DIGITAL WINDOW DISCRIMINATOR (WITH 128X16BIT BUFFER, PARALLEL + SERIAL I/P)	DWD 2046	SEN	1	/72	(8)
	TIME TO PULSE HEIGHT CONVERTER (START=STOP I/P, MAX 256NSEC, RESOL 100PSEC)	CAM 4,17	METRIMPEX	2	/74	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	,17 OTHER DIGITAL AND/OR ANALOGUE MODULES =-MIXED ANALOGUE AND DIGITAL,NOT DATAWAY CONNECTED ETC					
	PROM PROGRAMMER	3090	KINETIC SYSTEMS	2	/75	
	DUAL BRIDGE POWER SUPPLY (FLOATING OUTPUTS EACH MAX 24V/200MA)	CAM 4,08-J	METRIMPEX	2	/74	
	OCTAL FLOATING POWERED BRIDGE (PT-THERMO-R APPL, USE WITH CAM 4,08-21)	CAM 4,08-41	METRIMPEX	2	/74	
	OCTAL FLOATING POWERED BRIDGE (PT-THERMO-R APPL, USE WITH CAM 4,08-22)	CAM 4,08-42	METRIMPEX	2	/74	
	COLD POINT POWER SUPPLY (FOR COLD POINT REFERENCE BRIDGES)	CAM 4,08-5	METRIMPEX	2	/74	
N	OPTOCOUPLER (24 INDEPENDENT CHANNELS)	632BA	POLON	1	8/76	
N	OPTOCOUPLER (24 INDEPENDENT CHANNELS)	632AA	POLON	1	8/76	
N	OPTOCOUPLER (24 INDEPENDENT CHANNELS)	633AA	POLON	1	8/76	
N	OPTOCOUPLER (24 INDEPENDENT CHANNELS)	634AA	POLON	1	8/76	
N	RELAY COUPLER (24 INDEPENDENT CHANNELS)	635BA	POLON	1	8/76	
N	RELAY COUPLER (24 INDEPENDENT CHANNELS)	635AB	POLON	1	8/76	
N	RELAY COUPLER (24 INDEPENDENT CHANNELS)	635AA	POLON	1	8/76	
	NUMERICAL CONTROL SYSTEM, CAMPUS (CAMAC MICRO PROCESSOR UNIVERSAL SYSTEM)	C 500	RDT		/76	
	DATA RECEIVER FOR MECHANICAL OPERATIONS (5 DECADE DATA,3 DECADE INSTRUCTION REG)	C 501	RDT	0		(7)
N	REPROM MEMORY PROGRAMMTION MODULE	JPROM 10	SCHLUMBERGER	2	/76	
	CAMAC PROM PROGRAMMER		SENSION	2		(13)
	CURRENT SOURCE (1MA TO 10MA AND FOR PT 100 ADAPTOR)	C 76451-A5-A1	SIEMENS	2	/73	
N	CONTROLLER FOR NI-WIRE-READOUT	27 34 655/A	WEHRMANN	1	/75	
N	DIGITIZER FOR NI-WIRE-READOUT	27 34 655/B	WEHRMANN	1	/75	
	,2 SYSTEM CONTROL EQUIPMENT- COMPUTER COUPLERS, CONTROLLERS AND RELATED EQUIPMENT **********					
	,21 INTERFACES/DRIVERS AND CONTROLLERS =-PARALLEL MODE FOR 4600 BRANCH AND OTHER MULTI-CRATE BUS, SINGLE-CRATE SYSTEMS,AUTONOMOUS SYSTEMS					
N	MACAMAC CONTROLLER WITH MICROPROCESSOR FOR AUTONOMOUS CRATE OPERATION	1521	BORER	2	03/76	
	,211 INTERFACES/DRIVERS FOR MULTICRATE SYSTEMS I (4600 BRANCH COMPATIBLE)					
	EXECUTIVE SUITE ASSEMBLY OF MODULAR CONTROLLERS IN CAMAC CRATE, COVERS SYSTEM COMPLEXITY FROM SINGLE SOURCE-SINGLE CRATE TO MULTI SOURCE-MULTI CRATE SYSTEMS,COMPRISING		GEC-ELLIOTT			
	EXECUTIVE CONTROLLER (TRANSFORMS STANDARD CRATE INTO SYSTEM CRATE)	MX-CTR-2		2	/72	
	BRANCH COUPLER (ONE PER BRANCH, MAX 7)	BR-CPR-2		2	/72	
	AND SYSTEM INTERFACE SOURCE UNITS, ALSO OPTIONALLY AUTONOMOUS CONTROLLER SOURCE UNITS (ALL INSERTED INTO SYSTEM CRATE)		GEC-ELLIOTT			
	PDP-11 SYSTEM INTERFACE, COMPRISING		GEC-ELLIOTT			
	PROGRAM TRANSFER INTERFACE	PTI-11 C/D		3	/72	
	UNIBUS TERMINATION UNIT	TRM-11-1		1	/74	
	INTER UNIT BUS (LINKS UNIBUS TO ALL SI SOURCE UNITS FORMING INTERFACE)	IUB-X			/74	
	INTERRUPT VECTOR GENERATOR (ADDS AUTONOMOUS ENTRY OF GL-DERIVED INTERRUPTS)	IVG-11		1	/72	
	AUTONOMOUS MEMORY ACCESS CONTROLLER (2 USEC/WORD TRANSFER TO PDP-11 STORE)	AMC-11		2	/75	
	NOVA/SUPERNOVA SYSTEM INTERFACE, COMPR		GEC-ELLIOTT			
	PROGRAM TRANSFER INTERFACE	PTI-N C/D		3	/72	
	I/O BUS TERMINATION UNIT	TRM-N		1	/72	
	INTER UNIT BUS	IUB-X			/74	
	INTERRUPT VECTOR GENERATOR (256 BIT TRAP STORE, BRANCH OR GL PRIORITY MODES)	IVG-2402		1	/74	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	INTERFACE FOR HONEYWELL 316-516 COMPUTERS, COMPRISING--		NUCL. ENTERPRISES			
	24-BIT CONTROLLER	9030		3	/72	(7)
	AND					
	INTERFACE CARD FOR HONEYWELL 316-516	9038			/74	
	INTERFACE FOR K202 COMPUTER (24BIT,AUTONOMOUS BLOCK TRANSFERS TO/FROM MEMORY, L-NUMBER INTERRUPT ENCODER)	100	POLON	3	/73	
	SINGLE CRATE CONTROLLER FOR MICRAL N/G/S	JC MIC 10	R 2 E	2	/75	(13)
	CRATE INTERFACE FOR MULTI 20 OR MULTI 8	J CM 8/20	SCHLUMBERGER	3	/74	
	CRATE CONTROLLER 320	C 72451-A1446-A6	SIEMENS	3	/72	
	CRATE CONTROLLER 404	C 76451-A1446-A7	SIEMENS	2	/73	
	,214 CONTROLLERS FOR AUTONOMOUSLY OPERATED SYSTEMS (AND RELATED UNITS)					
C	DATA PROCESSOR (AUTONOMOUS PROGRAMABLE SINGLE DATAWAY CONTROLLER 64 REGISTERS PROM AND RAM MEMORY EXPANDABLE)	DO 200-2851	DORNIER	3	/73	
		DO 200-2851		3	/73	
	MICROCOMPUTER	3880	KINETIC SYSTEMS	2	/75	
	CRATE CONTROLLER FOR 3880	3908		2	/75	
N	AUTONOMOUS CONTROLLER WITH BUILT IN MICROPROCESSOR	JCAM 10	SCHLUMBERGER	3	/76	
N	PROGRAMMING CONSOLE FOR JCAM 10	JCOCAM 10	SCHLUMBERGER	2	/76	
N	12K BYTE MEMORY EXTENSION	JEM 12	SCHLUMBERGER	2	/76	
	CADET (SINGEL-CRATE CONTROLLER FOR READ-ONLY SYSTEM, INCL MODULE TEST & DISPLAY)	CT 2058	SEN	4		(12)
	PRINT BUFFER (ALLOWS A PARALLEL PRINTER TO BE USED WITH THE CT 2058)	PB 2059		0		(12)
	PROGRAMMABLE CRATE CONTROLLER	S 800	SENSIUN	22		(13)
	PROGRAMMABLE CRATE CONTROLLER	S 804	SENSIUN	22		(13)
N	DMA CONTROLLER FOR PDP11	EC 369	SENSIUN	2	10/76	
	,217 OTHER PARALLEL MODE INTERFACES/DRIVERS/CONTROLLERS					
	SYSTEM CRATE CONTROLLER	3960	KINETIC SYSTEMS	2	/73	
	MODCOMP I,MODCOMP II & MODCOMP III SYSTEM DRIVER(USE WITH 3960)	3970		2	/73	
	CONTROL DATA 6000 SERIES SYSTEM DRIVER (USE WITH 3960)	3973		3	/75	
	MANUAL SYSTEM DRIVER(USE WITH 3960)	3980	KINETIC SYSTEMS	2	/73	
	,22 INTERFACES/CONTROLLERS/DRIVERS FOR SERIAL HIGHWAY					
N	MACAMAC CONTROLLER AS TYPE 1521 BUT ADAPTED FOR SERIAL HIGHWAY OPERATION	1521-L1	BORER	2	/76	
	SERIAL CRATE CONTROLLER TYPE L-1 (CONFORMING TO ESONE/SH/01 AND ERRATA)	SCC 2401	GEC-ELLIOTT	2	/75	
	SERIAL EXTENSION UNIT, 8 BIT BYTE SERIAL LINK, BRANCH COMPATIBLE, CONSISTING OF		JOENGER		/73	(8)
	SERIAL CRATE CONTROLLER *L-1* (CONFORMS TO ESONE/SH/01 & TID-26488 + ERRATA)	74		2	/74	(11)
	MANUAL SERIAL DRIVER (BIT/BYTE MODE, MULTIPLE MESSAGES, ERROR GENERATION)	78	JORWAY	4	/74	
	PDP-11 INTERFACE (BRANCH AND/OR SERIAL HIGHWAY,DMA,BDV11 REG. ASSIGNMENTS)	411	JORWAY	NA	/75	
N	SERIAL HIGHWAY DISPLAY-BIT,BYTE TO 5 MHZ 16BYTE MEM, 9BYTE DISPLAY DATAWAY READ,	77	JORWAY	2	/76	
	MASTER LOOP CONTROL UNIT	3930	KINETIC SYSTEMS	2	/75	
	SERIAL HIGHWAY LOOP CONTROL UNIT	3931	KINETIC SYSTEMS	2	/75	(13)
	TRANSF. ISOLATED SERIAL D-PORT ADAPTER	3932	KINETIC SYSTEMS	1	/75	(13)
	CRATE CONTROLLER EXPANDER	3940	KINETIC SYSTEMS	1	/75	
	TYPE L-1 CRATE CONTROLLER FOR THE "STANDARD" SERIAL HIGHWAY	3952	KINETIC SYSTEMS	2	/75	(13)
	DRIVER FOR SERIAL HIGHWAY	3992	KINETIC SYSTEMS	3	/74	(11)
	DRIVER FOR SERIAL HIGHWAY (WITH 256 WORD FIFO BUFFER)	3994	KINETIC SYSTEMS	4	/75	(13)
	SERIAL HIGHWAY CONTROLLER	9080	NUCL. ENTERPRISES		/75	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	SERIAL CRATE CONTROLLER SPECIFICATION L1	CR 6001	ROVSING	2	/75	(13)
N	SERIAL HIGHWAY DRIVER	0386	SENSIUN	1	/76	
N	SERIAL HIGHWAY DRIVER FOR PDP11	0387	SENSIUN	NA	/76	
	,23 UNITS RELATED TO 4600 BRANCH OR OTHER PARALLEL MODE CONTROL/DATA HIGHWAY --CRATE CONTROLLERS, TERMINATIONS,LAM GRADERS,BRANCH/BUS EXTENDERS					
N	MACRO-MEMORY (MEM, FOR MACRO-COMMANDS AND DATA ENTERED VIA DATAWAY OR F, P, SWITCHES; ACC, PART TO DATA PROCESSOR)	DO 200-2985	DORNIER	2	/74	
	DISPLAY DRIVER(CONTROLS 72A DISPLAY, ALSO CRATE CTR AND BRANCH DRIVER)	72A	JORWAY	8	/71	
	,231 CRATE CONTROLLERS (TYPE A-1, OTHER CC TYPES)					
	TYPE A-1 CRATE CONTROLLER	1301	BI KA SYSTEMS	2	/73	
	CRATE CONTROLLER /ESONE TYPE A1/ (CONFORMS TO EUR4600 SPECS)	1502	BORER	2	/72	
	CRATE CONTROLLER TYPE CCA-1 ACCORDING TO EUR4800 SPECS WITH CERN OPTIONS	DO 200-2905	DORNIER	2	/74	
	ESONE TYPE A,1 CRATE CONTROLLER(CONFORMS TO EUR4600 SPECS, INCL CERN HOLD OPTION)	CC 2405	GEC-ELLIOTT	2	/73	
	CRATE CONTROLLER TYPE A-1 (CONFORMS TO EUR4600 SPECS)	CCA-1	JOERGER	2	/72	(5)
	BRANCH CRATE CONTROLLER/TYPE A-1 (CONFORMS TO EUR 4600 SPECS, 1972)	70A	JORWAY	2	/73	(7)
	TYPE A-1 CRATE CONTROLLER	3900	KINETIC SYSTEMS	2	/73	
	TYPE A-1 CRATE CONTROLLER (CONFORMS TO EUR4600 SPECS)	CAM 1,01	METRIMPEX	2	/73	
	CRATE A-1 CONTROLLER (CONFORMS TO EUR 4600 SPECS)	9016	NUCL, ENTERPRISES	2		(4)
	CRATE CONTROLLER TYPE A (CONFORMS TO EUR4800 SPECS)	C 106	RDT	2	/71	
	CRATE CONTROLLER TYPE A-1 (CONFORMS TO EUR4600 SPECS)	J CRC 81	SCHLUMBERGER	2	/72	(1)
	A-1 CRATE CONTROLLER (CONFORMS TU EUR4800 SPECS, INCL CERN SPEC HOLD LINE)	ACC 2034	SEN	2	/72	
	CRATE CONTROLLER A1 (EUR 4600 SPECS AND CERN NOTE 38-00)	C 72451-A1446-A2	SIEMENS	2	/70	(1)
	,232 LAM GRADERS					
	LAM GRADER (24 BIT MASK REGISTER, PLUG-IN PATCH BOARD, CERN 064)	LG 2401	GEC-ELLIOTT	1	/72	
	LAM GRADER (INTERNALLY PATCHABLE, SWITCH SELECTABLE MULTI-CRATE BG-RESPONSE)	LG	JOERGER	1	/73	(8)
	LAM GRADER-SORTER	75	JORWAY	1	/73	(7)
	LAM GRADER (24 BIT)	CAM 1,10	METRIMPEX	1	/74	
	LAM GRADER (DESIGNED TO EUR 4600 SPECS)	064	NUCL, ENTERPRISES	1	/72	(4)
	PRIORITY GRADER	9037	NUCL, ENTERPRISES	1		(10)
	LAM GRADER (CERN SPECS 064)	C 107	RDT	1	/71	
	LAM GRADER (CERN SPECS 064)	LG 2001	SEN	1	/72	(6)
N	LAM GRADER	EC 370	SENSIUN	1	/76	
	LAM GRADER (24BIT MASK REG, WITH CABLE, PATCHABLE C-ADDR-REG FOR MULTI-CRATE BG)	C 76451-A18-A1	SIEMENS	0	/74	
	LAM GRADER(24I/P-&24MASKED-&SUM-LAM-LEDS 24G,&24M,LAM-SUM-TOG,LAM1-7-PATCHPANEL)	C-LG-24	WENZEL ELEKTRONIK	1	/75	(14)
	,233 TERMINATIONS (SIMPLE, WITH INDICATORS)					
	BRANCH HIGHWAY TERMINATOR	6601	BI KA SYSTEMS	1	/73	
	BRANCH TERMINATION UNIT (WITH BUILT-IN CABLE)	1592	BORER	1	/73	
	BRANCH TERMINATION UNIT (NON INDICATING)	BT 6503	GEC-ELLIOTT	2	/72	
	BRANCH TERMINATION UNIT	BT 6601	GEC-ELLIOTT	2	/71	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	BRANCH TERMINATOR	BT	JOERGER	2	/72	
	BRANCH TERMINATION WITH INTEGRAL CABLE	50C	JORWAY	2	/72	
	BRANCH TERMINATOR IN A CONNECTOR	BT-01	KINETIC SYSTEMS	NA	/73	
	BRANCH TERMINATOR	CAM 1,11-1	METRIMPEX	2	/72	
	BRANCH TERMINATOR	J BT 20	SCHLUMBERGER	2	/71	
	BRANCH TERMINATOR (NON-INDICATING, 40 CM FLYING CABLE WITH BRANCH CONNECTOR)	BT 231	SEMRA-BENNEY	1	/74	
	(DITTO, XXX= CABLE LENGTH IN CM)	BT 231XXX		1	/74	
	CRATE CONTROLLER BUS TERMINATOR FOR A-1 CRATE CONTROLLER	BT 2048	SEN	1	/72	
	BRANCH HIGHWAY TERMINATOR	BHT 2055	SEN	1	/74	(11)
	BRANCH TERMINATOR (FULL BRANCH MONITOR WITH INTERNAL STORAGE AND LED DISPLAY)	BT 6502	GEC-ELLIOTT	2	/72	
	VISUAL BRANCH TERMINATOR (STORES AND DISPLAYS ON LEDS BRANCH SIGNALS)	VBT	JOERGER	2	/72	(6)
C	BRANCH TERMINATION WITH BRANCH DISPLAY AND INTEGRAL CABLE	51C	JORWAY	2	/72	
	BRANCH TERMINATOR (WITH INDICATORS)	CAM 1,11-2	METRIMPEX	2	/72	
	BRANCH TERMINATION UNIT (WITH INDICATOR AND POWER SUPPLY)	C 72451-A10-A1	SIEMENS	NA	/73	(3)
	,234 BRANCH EXTENDERS, BUS EXTENDERS					
	DIFFERENTIAL BRANCH EXTENDER (FOR EXTENDING BRANCHES UP TO 3 KM)	DBE 6501	GEC-ELLIOTT	2	/71	
	BRANCH HIGHWAY TRANSCEIVER FOR LONG DISTANCE TRANSMISSION	J BHT 10	SCHLUMBERGER	2		(4)
	SERIAL DRIVER (TERMINATES BRANCH HIGHWAY AND RETRANSMITS COMMAND SERIALLY)	SD	JOERGER	2		
	SERIAL RECEIVER (RECEIVES SERIAL DATA, DRIVES TYPE A-1 SYSTEM, OPTICAL ISOL)	SR		2		
	UNIBUS EXTENDER, TRANSMITTER	1594	BURR	2	/72	
	RECEIVER	1595		2	/72	
	(FOR DISTANCES UP TO 200 METRE OR MORE)					
N	LIGHT PEN	9301	NUCL. ENTERPRISES		7/76	
N	JOYSTICK	9302	NUCL. ENTERPRISES		/76	
	,3 TEST EQUIPMENT **********					
	,31 SYSTEM RELATED TEST GEAR					
	SYSTEM CHECK OUT UNIT, STORES DATA & COMMAND IN READABLE REGS, PROGRAMMABLE L	DTM 4	GEC-ELLIOTT	1	/74	
	SYSTEM TEST UNIT (FOR EXECUTIVE SUIT SYSTEM CONFIGURATION, SEE MX-CTR-2)	SC-TST-1	GEC-ELLIOTT	3	/72	
	,311 COMPUTER SIMULATORS					
	PDP-11 SIMULATOR	6101	BI HA SYSTEMS	NA	/72	(5)
	TEST CONTROLLER WITH PROGRAM PLUGBOARD	SPS 2048	NUCL. ENTERPRISES	2	/75	(12)
	,32 BRANCH RELATED TESTERS/CONTROLLERS AND DISPLAYS					
	,321 BRANCH TESTERS/CONTROLLERS (MANUAL, PROGRAMMED)					
	MANUAL BRANCH TESTER (TYPE A SYSTEM TEST SET WITH MX-CTR-2 & BR-CPR-2)	SC-TST-1	GEC-ELLIOTT	7		
C	MANUAL CONTROLLER (SWITCHES FOR N,A,F,C, I,Z,UP-MODES-REPEAT,SINGLE & STEPPING)	140	POLON	4	/75	
	BRANCH HIGHWAY TEST POINT MODULE(24 DIRECT,22 INDIRECT ACCESS POINTS FOR TEST)	CD 18104	HUGHES	NA	/71	(3)
	BRANCH HIGHWAY REMOVE INHIBIT MODULE (REMOVES INHIBIT FROM BCR/BA/BF/BN/BTA)	CD 18105	HUGHES	NA	/71	(3)
	MANUAL BRANCH DRIVER (FOR TESTING TYPE A SYSTEMS)	MBD	JOERGER	5	/72	(6)
	MANUAL BRANCH CONTROL SET (COMPRISING TYPES C COB 10 AND T CMB 10)	C CMB 10	SCHLUMBERGER	NA	/71	(1)

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	,33 DATAWAY RELATED TESTERS AND DISPLAYS					
	,331 DATAWAY CONTROLLERS/TESTERS MANUAL, PROGRAMMED)					
C	MC WORD GENERATOR FOR USE WITH TYPE 140 (24 BITS WORD TO W BUS LINES)	232	POLON	1	/75	
C	WORD DISPLAY FOR USE WITH TYPE 140 (24 BITS REGISTER WITH INDICATION)	260	POLON	1	/75	
	TEST CONTROLLER24	744006/D	WEHRMANN	1	/75	
	TEST CONTROLLER25	744006/E	WEHRMANN	1	/75	
	MANUAL CRATE CONTROLLER	GFK-LEM	EISENMANN	8	/71	
	MANUAL CRATE CONTROLLER	MCC	JOERGER	8	/72	
	MANUAL DATAWAY TEST CONTROLLER	CAM 7,01	METRIMPEX	3	/73	
	MANUAL DATAWAY CONTRULLER/DISPLAY SYSTEM INTERFACE TO DATAWAY CONTROL AND DISPLAY CRATE	D AI 10 J DA 10 C AI 10	SCHLUMBERGER	1 NA	/71	
	MANUAL CRATE CONTROLLER	J CMC 10	SCHLUMBERGER	8	/71	(1)
	TEST MODULE FOR CRATE CONTROLLER AND DATAWAY	DTM 2040	BEN	1	/72	
	DYNAMIC TEST CONTROLLER (GENERATES ALL POSSIBLE CAMAC COMMANDS IN SINGLE CRATE)	TC 2403	GEC-ELLIOTT	3	/71	
	DYNAMIC TEST CONTROLLER (2 SIMULT TRANSF SINGLE,STEP-BY-STEP AND CONTINUOUS MODE)	C 108	RDT	8	/71	(4)
	DATAWAY SERVICE MODULE	J DS 10	SCHLUMBERGER	1	/74	(12)
	MANUAL INPUT/OUTPUT (TEST UNIT PROVIDES MANUAL DATA INPUT & VISUAL DATA OUTPUT)	MI/O	JOERGER	1	/75	
	,332 DATAWAY DISPLAYS					
N	DATAWAY DISPLAY	JDS 20	SCHLUMBERGER	1	/76	
	DATAWAY DISPLAY	734653/A	WEHRMANN	2	/75	
	CAMAC TEST MODULE/DATAWAY DISPLAY	6102	BI RA SYSTEMS	2	/73	
	CAMAC DATAWAY DISPLAY (DATAWAY SIGNAL PATTERN STORED/DISPLAYED,2 TEST MODES)	1801	BORER	1	/71	(1)
	CAMAC DATAWAY TEST AND DISPLAY MODULE	LEM-52/16,2	EISENMANN	1		
	DATAWAY MEMORY (DISPLAY + READABLE REGISTER)	C 340	INFORMATEK	1	/72	
	DATAWAY DISPLAY (STORES AND DISPLAYS DATAWAY SIGNALS, FARWQXCIZS192BP1P2)	DD	JOERGER	1	/72	(6)
	DATAWAY DISPLAY (SEPARATE R & W DISPLAY, TRACKS OR STORES, MANUAL CLEAR)	202	JORWAY	1	/74	(11)
	DATAWAY DISPLAY	3290	KINETIC SYSTEMS	1	/72	
N	EXPANDER FOR MODEL 3290	3295	KINETIC SYSTEMS	1	/76	
	DATAWAY DISPLAY (WITH MEMORY, FOLLOW, ON-LINE & TRIGGER MODES)	9554	NUCL. ENTERPRISES	1		(13)
	DATAWAY DISPLAY	C 76451-A16-A1	SIEMENS	1	/73	(6)
	DATAWAY DISPLAY (DISPLAYS AND STORES DATAWAY SIGNAL PATTERN)	C-D1-24	WENZEL ELEKTRONIK	1	/72	
	,34 MODULE RELATED TEST GEAR (MODULE EXTENDERS)					
	CAMAC MANUAL MODULE TESTER	6103	BI RA SYSTEMS	NA	/74	
	,341 MODULE EXTENDERS					
	CAMAC EXTENDER MODULE	8201	BI RA SYSTEMS	1	/73	
	EXTENSION FRAME (MODULE EXTENDER)	EF 1-1	GEC-ELLIOTT	1	/71	
	MODULE EXTENDER (+AND-6V,+AND-24V FUSED, RETRACTABLE LOCKING DEVICE)	ME	JOERGER	1	/72	
	EXTENDER MODULE (FUSED +&-6V AND +&-24V, SUPPORT ARM)	11A	JORWAY	1	/74	
	EXTENDER MODULE (W/36 POS PC EDGE CONN)	1100	KINETIC SYSTEMS	1	/71	(4)
	EXTENDER CARD	1150F	KINETIC SYSTEMS	1		
	DATAWAY EXTENDER MODULE	9073	NUCL. ENTERPRISES	1	/75	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
N	FLEXIBLE 86 WAY EXTENDER	9075	NUCL. ENTERPRISES	NA	/76	
	BUFFERED EXTENDER (35NSEC PROPAGATION DELAY, 60 CM FLEXIBLE CABLE)	060	POLON	1	/75	
	EXTENDER MODULE	061	POLON	1	/73	
	EXTENDER	CEX	RDT	1	/72	
	MODULE EXTENDER	ME 2030	SEN	1	/70	
	EXTENDER (XXX=LENGTH OF CABLE IN MM BEYOND RACK, SINGLE WIDTH)	577/XXX	TEKDATA	1	/72	(5)
	(DITO, DOUBLE WIDTH, FIXED SIDES)	5813/XXX		2	/73	
	(DITO, DOUBLE WIDTH, HINGED SIDES)	5824/XXX		2	/76	
N	CAMAC-EXTENDER MODULE	C E M	WEHRMANN	1	/76	
N	9030 INTERFACE CARD EXTENDER	9074	NUCL. ENTERPRISES	NA	/76	

.37 OTHER TEST GEAR FOR CAMAC EQUIPMENT

TRANSIENT GENERATOR(MODULE NOISE SUSCEPTIBILITY TESTED BY TRANSIENTS ON DC LINES	TG	JOERGER	1	/73	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	.4 CRATES, SUPPLIES, COMPONENTS, ACCESSORIES ********** .41 CRATES AND RELATED COMPONENTS/ACCESSORIES -- CRATES WITH/WITHOUT DATAWAY AND SUPPLY, BLANK CRATES,CRATE VENTILATION GEAR .411 CRATES WITH DATAWAY AND SUPPLY					
	CRATE (270VA,COOLED,MODULAR POWERED BY MAX 8X1922 OR 1X1923/1925 + MAX 4X1922)	1902A	BORER	25	/69	
	VOLTAGE REGULATOR (FOR +OR=24V/6A, +/=12V/7A,+/=6V/8A/16A/24A)	1922			/69	
	VOLTAGE REGULATOR (+&=6V 25A MAX, OR 40A MAX WITH EXTERNAL +6V SUPPLY)	1923			/74	
	VOLTAGE REGULATOR (+AND=6V, 25A MAX, 270W RATING, USABLE WITH 4X1922)	1925			/73	
	CAMAC MINICRATE (19 INCH RACK MOUNTING) (+6V/15A,=6V/8A, +24V/2A,=24V/2A,200W)	307,100CC	EDS SYSTEMTECHNIK	17	/73	(10)
	POWERED CRATE (INCL. CRATE AND POWER SUPPLY COOLING TO SUPPL CP 1 SPEC)	PS 004/PA1/VC 0040	GEC=ELLIOTT	25	/75	
	POWERED CRATE (+&=6V/40A, +&=24V/8A, 200V7,1A, 117V AC, MAX 300W)	CPC/14	GRENSUN		/73	
	POWERED CRATE (+&=6V/20A, +&=24V/5A, 200V/0,03A, 117VAC/0,5A, MAX 200W)	CPC/15			/75	
N	MINICRATE=PORTABLE OR RACK=INTEGRAL BLOWER AND POWER SUPPLY = 10 STATIONS	463	JORWAY	10	/76	
	POWERED CRATE	1500/25	KINETIC SYSTEMS	NA	/73	
	POWERED CRATE (42A CAPABILITY ON +6V)	1500/42	KINETIC SYSTEMS	NA		
	POWERED CRATE (MAX 400W, +&=24V/3A, +&=12V/3A,+&=6V/24A,=6V/6A,+200V7,1A,AC)	CAM 9,01	METRIMPEX	24	/72	
	POWERED CRATE (+AND=6V/25A, +AND=24V/6A, (INCL POWER DESIGN TYPE AEC432 SUPPLY)	NSI=875CC100AEC432	NUCL, SPECIALTIES	25	/72	
	POWERED CRATE (6U,VENTILATED,NO FAN,130W +6V/15A,=6V/4A,+AND=24V/2A,+200V/50MA)	2000	POLON	25	/71	
N	POWERED CRATE (6U,WITH DATAWAY,130W MAX, +6V/15A,=6V/4A, VENTILATED, NO FAN)	2001	POLON	25	/76	
N	POWERED CRATE (7U,WITH DATAWAY,130W MAX, +6V/15A,=6V/4A,+=24V/2A,4 FANS, FILTER)	2002	POLON	25	/76	
N	POWERED CRATE (7U,WITH DATAWAY,300W MAX, +=6V/25A,+=24V/6A, 4 FANS,FILTER)	2003	POLON	25	/76	
N	POWERED CRATE (8U,WITH DATAWAY,300W MAX, +=6V/25A,+=24V/6A, 4 FANS,FILTER)	2004	POLON	25	/76	
	POWERED CRATE	CCHN=CSAN	RDT	25	/71	
	POWERED CRATE(SEE P7 ALJ 13)	C7 ALJ 13 DW	SAPHYMO=STEL	25		(1)
	POWER SUPPLY (CAMAC CRATE)	CM5125/53/DW/BLOCS	SAPHYMO=STEL	25	/72	
N	POWER SUPPLY CRATE (+6V/24A,=6V/16A, +&= 24V/3A, 300W)	CJAL 42	SCHLUMBERGER		/76	
	POWER CRATE (200W MAX,+6V/25A,=6V/10A, +AND=12V/3A,+AND=24V/3A,200V/0,05A)	PC 2006/B	SEN	25	/70	
	POWER CRATE (200W MAX,+6V/25A,=6V/10A, +AND=24V/3A,200V/0,05A)	PC 2006/C		25	/71	
	COMPLETE POWER CRATE	CPC 2057	SEN	25	/74	(11)
	POWERED CRATE (500W, +6V/65A OR 25A, =6V/25A OR 65A, MAX TOT CURRENT IS 80A)	HPC 2075	SEN	25		(14)
	POWERED CRATE (200W, +&=6V/10A, +&=12V/2A, +&=24V/3A)	SPC 2077	SEN	25		(14)
	POWERED CRATE (7U,VENT,+AND=6V/20A,+AND=12V/6,5A,+AND=24V/6,5A,200V/0,1A,200W)	C 76455=A2	SIEMENS	25	/71	(3)
	POWERED CRATE (SAME BUT WITH 117V AC)	C 76455=A1		25	/71	
N	CAMAC=CRATE 500 W (CERN SPEC, 099)	FHD=H1	WEHRMANN		/75	
N	CAMAC=CRATE 300 W	FST=HV1	WEHRMANN		/76	
N	CAMAC=CRATE 400 W	FDS=HV1	WEHRMANN		/75	
	POWERED CRATE (SEE CRATE C=CF AND SUPPLY P=156 FOR RATINGS)	C=CF + P=156	WENZEL ELEKTRONIK	25	/75	
	POWERED CRATE (SEE C=CF & SUPPLY P=264)	C=CF + P=264		25	/75	
	POWERED CRATE (SEE C=CF & SUPPLY P=300F)	C=CF + P=300F		25	/75	(14)

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	.412 CRATES WITH DATAWAY, WITHOUT SUPPLY					
	VENTILATED CRATE (HEAVY DUTY 25 STATION FASTON CONNECTORS, 6U HIGH)	VC 0022	GEC-ELLIOTT	25	/74	
	(SAME BUT WITH ALL PATCH LINES BUSSED AS PER COGELAB REQUIREMENTS)	VC 0030		25	/74	
	6U CRATE 25 STATION HEAVY DUTY, FITS TO PS 0004 USING ADAPTOR PA 1,	VC 0040	GEC-ELLIOTT	25	/75	
	CONVERTS FASTON CONNECTORS TO RECOMMENDED FIXED POWER CONNECTOR ON CHOSEN CRATE	/AMP	GEC-ELLIOTT		/73	
	CAMAC CRATE VERDRAHTET (EMPTY CRATE WITH WIRED DATAWAY)	2,084,000,6	KNUERR	25	/73	(2)
	CRATE	9070	NUCL. ENTERPRISES	24	/74	
	CAMAC COMPATIBLE CRATE (WIRED)	NSI-875 DB-WV	NUCL. SPECIALTIES	25	/71	
	CAMAC CRATE (WIRED)	NSI-875 CC 100	NUCL. SPECIALTIES	25	/72	
	UNPOWERED CRATE WITH DATAWAY (6U, VENTILATED, NO FAN, 25 STATIONS)	002	POLON	25	/75	
	UNPOWERED CRATE WITH DATAWAY (6U, EMPTU, VENTILATED, NO FAN)	012	POLON	25	/71	
	UNPOWERED CRATE WITH DATAWAY (360 MM) (525 MM)	CM 5125/33/DW CM 5125/53/DW	SAPHYMO-STEL	25 25		
	UNPOWERED CRATE WITH DATAWAY AND CONNECTORS	UPC 2029	SEN	25	/70	
N	CAMAC-CRATE WITH DATAWAY	DIFFERENT	WEHRMANN		/74	
	WIRED CRATE (HEAVY DUTY, 3 FAN & MONIT, UNIT, 6U, USE WITH P-156, P-264, P-300F)	C-CF	WENZEL ELEKTRONIK	25	/75	(14)
	CRATE (WITH DATAWAY AND VENTILATION)	C 76455-A3	SIEMENS	25	/72	
	.413 CRATES WITHOUT DATAWAY, WITH SUPPLY					
	CAMAC CRATE (+6V/25A,-6V/12,5A,+&-24V/6A,+&-12V/4A)	DU 200-3001	DORNIER	NA	/74	
	(SAME WITHOUT +&-12V SUPPLY)	DU 200-3002		NA	/74	
N	CRATE, PLUG IN PS, 25 STATIONS, IRI, FAN	9071/1	NUCL. ENTERPRISES	NA	8/76	
	.417 BLANK CRATES AND OTHER COMPONENTS AND ACCESSORIES					
	RACK BLOWER (1 U HIGH, MAY BE USED WITH AIR SCOOP NSI-12109-AS FOR HI EFFIC.)	NSI-05235-RB	NUCL. SPECIALTIES	NA	/75	
N	VENTILATION SLOT UNIT,1U,NO FAN & FILTER	076	POLON	25	/75	
N	FORCED VENTIL.UNIT,2U,4 FANS & FILTER	077	POLON	25	/75	
N	CAMAC-TEST BOARDS (EXP. CARDS)	A	WEHRMANN	NA	/75	
N	CAMAC-TEST BOARDS (EXP. CARDS)	B	WEHRMANN	NA	/75	
	CRATE (5U,EMPTY, 25 STATIONS)	MCF/5CAM/S/25	IMMUF-BEDCO	25	/71	
	(SAME BUT WITH 24 STATIONS)	MCF/5CAM/S/24		24	/72	
	CRATE (6U,EMPTY,WITH VENTILATION BAFFLE, 25 STATIONS, HARWELL TYPE 7000)	MCF/6CAM/SV/25		25	/71	
	(SAME BUT WITH 24 STATIONS)	MCF/6CAM/SV/24		24	/72	
	CRATE (6U,EMPTY,WITH VENTILATION BAFFLE, REMOVABLE PANEL, 25 STNS, HARWELL 7000)	MCF/6CAM/SVR/25		25	/71	
	(SAME BUT WITH 24 STATIONS)	MCF/6CAM/SVR/24		24	/72	
	CAMAC CRATE (EMPTY)	2,080,000,6	KNUERR	25	/70	(2)
	CAMAC CRATE (EMPTY,INCL HARDWARE SUPPLY CHASSIS AND VENTILATION PANEL)	2,086,000,6		25		(2)
	CAMAC COMPATIBLE CRATE	NSI 875 DB/WV	NUCL. SPECIALTIES	25	/70	
	CAMAC CRATE (UNWIRED)	NSI 875 CC 100	NUCL. SPECIALTIES	25	/72	(6)
	CHASSIS CAMAC (6 UNITES AVEC FENTE DE VENTILATION, 525 MM PROFONDEUR)	9905-1-05	OSL	25	/71	
	(360 MM PROFONDEUR)	9905-2-05		25	/71	
	CAMAC CRATE WITH VENTILATION BAFFLE (6U, 525MM DEPTH)	9905HVDJ/98/525	OSL	25		
	(SAME BUT WITH 460MM DEPTH)	99055HVJAVD/98/460		25		
	(SAME BUT WITH 360MM DEPTH)	99055HVJAVD/98/360		25		
	CRATE (6U, EMPTY, VENTILATED, NO FAN)	010	POLON	25	/71	
N	CRATE 6U, EMPTY	000	POLON	25	/74	
	VENTILATED CRATE NO POWER NO DATAWAY (TWO FANS)	CCHN	RDT	25	/71	
	(SAME WITH 3 FANS)	CCHNA		25	/72	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	UNPOWERED CRATE	UC 2057	SEN	25	/74	(11)
	CAMAC CRATE (EMPTY) HEAVY DUTY		OSL/WILLSMER&QUICK		/73	
	6U WITH VENTILATION BAFFLE	9905-5HV		25	/73	
	8U NON VENTILATED	9905-5H		25	/73	
	DEPTH OPTIONS 360MM, 460MM, 525MM					
	CAMAC CRATE WITH VENTILATION BAFFLE (6U, 525MM DEPTH)	99055HV3AVD/98/525	OSL/WILLSMER&QUICK	25	/73	
	(SAME BUT WITH 460 MM DEPTH)	99055HV3AVD/98/460		25	/73	
	(SAME BUT WITH 360 MM DEPTH)	99055HV3AVD/98/360		25	/73	
	VENTILATION UNIT	CAM/FV	IMHOF-BEDCO		/73	
	LUFTEREINHEIT (VENTILATION UNIT,COMPLETE WITH 3 FANS AND FILTER)	2,081,000,6	KNUERR		/70	
	(VENTILATION UNIT,NO FAN,NO FILTER)	2,085,000,6				
	AIR SCOOP (STOPS CHIMNEY EFFECT BETWEEN UN-VENTILATED CRATES IN RACK, 1U HIGH)	NSI-12109-A8	NUCL. SPECIALTIES	NA	/71	
	VENTILATION MODULE	VM 2057	SEN		/74	(11)
	1U VENTILATION GRILL	1 UG	OSL/WILLSMER&QUICK		/72	
	CARD EXTENDER (FOR SUPPLY OF 2057)	CE 2061	SEN			

,42 SUPPLIES AND RELATED COMPONENTS/ACCESSORIES -- SINGLE- AND MULTI-CRATE SUPPLIES;BLANK SUPPLY CHASSIS,CONTROL PANELS;SUPPLY VENTILATION

,421 MULTI-CRATE SUPPLIES

	POWER SUPPLY FLEXIBLE SYSTEM (TO SPECS CERN-ISR-CO/72-43), COMPRISING	CPU/10	GRENSUN		/71	
	BASIC CRATE(FOR SUPPLY MODULES,INCLUDES REFERENCE,CONTROL AND 200V/0,1A)	CFC				
	SUPPLY MODULE(* IN TYPE = P FOR POS AND N FOR NEG OUTPUT VOLTAGE 6V/ 6A)	CF*/6				
	(12V/ 3A)	CF*/12				
	(24V/ 3A)	CF*/24				
N	CAMAC POWER SUPPLY - RACK MOUNTING TWIN OUTPUTS,EACH: +&-6V/25A, +&-24V/5A	CPU/17	GRENSUN		/75	
N	CAMAC POWER SUPPLY - RACK MOUNTING +&- 6V/25A, +&- 24V/5A	CPU/20	GRENSUN		/75	
	POWER SUPPLY SYSTEM (CRATE) (MODULE OPTIONS AS FOLLOWS)	C48MT204/C6BMT306	SAPHYMO-STEL		/72	
	POWER SUPPLY MODULE 6 V/10 A (6V/20A & 6V/40A OPTIONS ALSO AVAILABLE)	BP 75 6,10				
	12 V/ 2 A (ALSO 12V/4A, 7A, 15A & 25A OPTIONS)	B8N				
	24 V/ 1,2A (ALSO 24V/2,5A, 3,5A, 9A & 15A OPTIONS)	B8N				
N	MULTI CRATE SUPPLY	PT 45	WEHRMANN	NA	/75	
N	MULTI CRATE SUPPLY	PT 60	WEHRMANN	NA	/75	

,422 SINGLE-CRATE SUPPLIES

	POWER SUPPLY AND COOLING UNIT (+6V/42A, -6V/25A,+&-24V/6A, 375W, 2U FAN UNIT)	PS 0004	GEC-ELLIOTT		/75	
	POWER SUPPLY (+6V/20A,-6V/5A, +AND-24V/5A,200V/0,05A)	9001	NUCL. ENTERPRISES		/71	
	POWER SUPPLY (BACK MOUNTING,+6V/15A, -6V/3A,+AND-24V/2A,+200V/50MA,130W)	CZC-10	POLON		/73	
N	POWER SUPPLY/BACK MOUNTING, 300W MAX, +-6V/25A,+-24V/6A,200V/,1A,117V/,5A	041	POLON	25	/75	
	POWER UNIT (+6V/20A, -6V/15A,+24V/2A, -24V/2A,200V/0,1A)	SP 426	POWER ELECTRONICS		/74	
	POWER UNIT (+6V/25A, -6V/25A, +24V/5A, -24V/5A, 200V/100MA)	SP 558	POWER ELECTRONICS		/75	
	POWER SUPPLY (+6V/25A,-6V/5A, +AND-12V/3A,+AND-24V/3A,200V/0,1A)	C 303	RDT		/71	
	POWER SUPPLY UNIT -MAINTENANCE ONLY- (+6V/10A,-6V/2A,+AND-24V/1,5A)	P4 ALJ 13	SAPHYMO-STEL		/71	
	(+6V/5A,-6V/1,5A,+AND-12V/1,5A, +AND-24V/1,5A) -MAINTENANCE ONLY-	P6 ALJ 13				
	(+6V/25A,-6V/10A,+AND-12V/3A, +AND-24V/3A,+200V/0,1A,MAX 200W)	P7 ALJ 13	SAPHYMO-STEL			
	POWER SUPPLY (+6V/32A,-6V/32A,+24V/6A, -24V/6A,+200V/,1A,300W, POWER FAIL LAM)	PS 2057	SEN		/74	(11)

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	SUPPLY (+AND-6V/26A,+AND-12V/6,5A,+AND-24V/6,5A,200V/0,1A,117V AC, 200W MAX)	C 76458-A4	SIEMENS		/72	
	SUPPLY (SAME BUT WITHOUT 117V AC)	C 76455-A5			/72	
	PLUG-IN POWER SUPPLY 156W (+-6V/8A, +-12V/2A,+-24V/1A,117VAC)	P-156-1	WENZEL ELEKTRONIK		/75	
	PLUG-IN POWER SUPPLY 264W (+-6V/10A, +-12V/2A,+-24V/2A,117VAC,OPT,+200V/40MA)	P-264			/75	
	PLUG-IN POWER SUPPLY 300W&FAN(+-6V/32A, +-12V/3A,+-24V/6A,+200V/100MA,117VAC)	P-300F			/75	

,427 BLANK SUPPLY CHASSIS, UTHER COMPONENTS/ACCESSORIES

N	CONVERTER 24V/12V LOADING +B-12V/2A	058	POLON	2	10/76	
	POWER SUPPLY CRATE (STANDARD)	MCF/4/PPC	IMHOF-BEDCO	NA	/71	
	POWER SUPPLY CRATE (WIRED)	MCF/PPC/WV		NA	/71	
	NETZTEILCHASSIS (EMPTY SUPPLY CHASSIS)	2,082,000,6	KNUERR		/70	
	POWER SUPPLY CRATE(FOR SEPARATE SUPPLY)	CSAN	RDT		/71	
	MAINS SWITCH ASSEMBLY	MS 3	GEC-ELLIOTT	NA	/71	
	POWER INDICATOR	0704	NUCL. ENTERPRISES	NA	/70	

,43 RECOMMENDED OR STANDARD COMPONENTS/ACCESSORIES -- BRANCH CABLES,CONNECTORS ETC;DATAWAY CONNECTORS, BOARDS ETC;BLANK MODULES,OTHER SIND COMPONENTS

,431 BRANCH RELATED (CABLES, CONNECTORS ETC)

BRANCH HIGHWAY CABLE	8102	BI HA SYSTEMS		/73	
BRANCH HIGHWAY CABLE (WITH CONNECTORS, 27 CM LONG)	BHC 027	GEC-ELLIOTT		/72	
SAME,***=067,107 & 207 FOR CORRESP LENGTH IN CM,OTHER LENGHTS TO SPEC ORDER	BHC ***			/72	
BRANCH HIGHWAY CABLE ASSEMBLY (WITH CONNECTORS,27 CM LONG)	CC 66 POL PB-27	HUGHES		/71	
(XX CM LONG,PVC JACKET)	CC 66 POL PB-XX				
BRANCH HIGHWAY CABLE (COMPLETE PTFE CABLE ASSEMBLY,27CM LONG)	CD 18067-27	HUGHES		/70	
(***= 107, 207 = OR CUSTOMER SPECIFIED = FOR CORRESPONDING LENGTH IN CM)	CD 18067/***			/71	
BRANCH HIGHWAY CABLE		JUERGER			
BRANCH CABLE WITH CONNECTOR (1,5 FT TO 75 FT LONG)		JORWAY		/71	
BRANCH HIGHWAY CABLE (66 TWISTED PAIRS)	CL 90	SCHLUMBERGER		/71	
BRANCH HIGHWAY CABLE ASSEMBLY (CUMPLETE WITH CONNECTORS, LENGTH 27 CM)	BHC 27	SEMRA-BENNEY		/72	
(SAME, XXX=LENGTH IN CM, 040,100 ETC)	BHC XXX			/72	
BRANCH HIGHWAY CABLES(COMPLETE WITH CONNECTOR,XXX = LENGTH IN METERS)	2000/132/XXX	TEKDATA		/71	(4)
BRANCH HIGHWAY CONNECTOR (FREE MEMBER, PIN MOULDING WITH METAL PIN PROTECTOR)	WSS0132P088N827-M	HUGHES		/73	
BRANCH HIGHWAY CONNECTOR (FIXED MEMBER,SOCKET MOULDING)	WSS0132S00BN000	HUGHES		/70	
(FREE MEMBER,PIN MOULDING, PXX YYY SELECTS JACKSCREW)	WSS0132PXXBNYYY				
HOOD (FOR FREE MEMBER)	WAC 0132 H005				
EXTENDED BRANCH CABLE (LOW CUST TELE-PHONE CABLE FOR LONG BRANCH RUNS)	EBC XXXX	GEC-ELLIOTT		/72	
BRANCH HIGHWAY CABLE ONLY (PLAIN PVC JACKET)	66 POL PB	HUGHES		/71	
BRANCH HIGHWAY CABLE (132-WAY)	LIY-Y72X2X0,088	LEONISCHE		/72	
BRANCH HIGHWAY CABLE (TRUE 132-WAY WITH METALISED POLYESTER SCREEN, PVC JACKET)	LI2Y(ST)Y66X2X0,18	LEONISCHE			
CABLE FOR BRANCH HIGHWAY (PVC JACKET)	132 PE 189	PRECICABLE		/71	
(BRAIDED RILSAN JACKET)	132 PE 210				
(MEPLAT 20MMX10,8MM,GAINE PVC NOIR)	132 PE 291			/72	
CABLE EXTENSION MODULE (JOINS TWO BRANCH HIGHWAY CABLES)	CD 18106	HUGHES		/72	
BRANCH HIGHWAY TO PDP-11 (COMPLETE WITH CONNECTORS, XXX= LENGTH IN METERS)	5805/P/132/XXX	TEKDATA		/73	(8)
BRANCH HIGHWAY JUNCTION BOX	5849	TEKDATA		/75	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	.432 DATAWAY RELATED (CONNECTORS, BOARDS, ASSEMBLIES)					
	ADDRESS & FUNCTION DECODING PC	AFD 2066	SEN			
	DATAWAY MOTHERBOARD (WITH CONNECTORS)	1186	WEHRMANN		/74	(10)
	DATAWAY SOCKET (MOTHERBOARD COMPLETE WITH 25 CONNECTORS)	CIM	RDT		/70	
	DATAWAY MINI WRAPPING (MOTHERBOARD WITH 25 DATAWAY CONNECTORS)	J/DW	SAPHYMO-STEL		/71	
	DATAWAY CONNECTOR, EDGE TYPE II (WIRE WRAP)	1-163633-0	AMP AG		/70	
	(TERMI-POINT/WIRE WRAP)	1-163634-0			/70	
	(MOTHERBOARD SOLDER)	1-163636-0			/70	
	(WIRE SOLDER)	1-163636-0			/70	
	DATAWAY CONNECTOR WITH CARD GUIDES (HAND SOLDER, DIP SOLDER & MINI-WRAP)	PCBD43N77-1E00	BURNDY	NA	/74	
	DATAWAY CONNECTOR (MINIWRAP)	EAA 043 D301	HUGHES		/71	(2)
	CAMAC DATAWAY CONNECTOR (* INSERT A FOR SOLDER TAG, B SOLDER PIN, C MINI WRAP)	G03D 086P 2B * BL	ITT CANNON		/73	(6)
	CAMAC-LEISTE(DATAWAY CONNECTOR,WIREWRAP)	4,000,060,0	KNUERR		/70	
	DATAWAY FEMALE CONNECTOR, MINI-WRAP	8422 061 64334	PHILIPS		/71	(6)
	**=1 FOR WIRE SOLDER, 8 FOR BOARD SOLDER	2422 061 643**4				(6)
	DATAWAY MALE CONNECTOR (MATING THE CRATE MOUNTED 86-WAY CONNECTOR SOCKET)	2422 060 14314	PHILIPS		/72	(6)
	CONNECTEUR 864 DOUBLE FACE (DATAWAY CONNECTOR,WIRE WRAP)	864 DF 43 BWV	SOCAPEX		/70	
	(MOTHERBOARD SOLDER)	864 DF 43 AYV			/70	
	(WIRE SOLDER)	864 DF 43 AZV			/70	
	DATAWAY CONNECTOR (MINI-WRAP)	8606 86 21 15 000	SOURIAU		/71	
	(WIRE-SOLDER)	8606 86 21 10 000				
	(FLOW SOLDER)	8606 86 21 14 000				
	DATAWAY CONNECTOR (**2 FLOW SOLDER,**3 SOLDER LUGS,**4 MINIWRAP;AU PLATING)	C 288* C8P 221	UECL		/71	
	(FLOW SOLDER,NI + AU PLATING)	C 2886 C8P 221				
	(13 MINIWRAP CONTACTS,OTHER ARE FLOW SOLDER,NI + AU PLATING)	C 2886 C8P 221				
	(**7 MINIWRAP,**8 SOLDER LUGS, NI + AU PLATING)	C 288* C8P 221				
	MOUNTING BRACKETS FOR ABOVE	C 8583				
	DATAWAY CONNECTOR HOOD (43-WAY DOUBLE SIDED, 2,54 MM PITCH CONTACTS)	8 4051	TEKDATA	1	/75	
	.433 MODULE RELATED (BLANK MODULES, PATCHBOARD ETC)					
	CAMAC CARRYING CASE (TAKES 6 MODULES)	C/NCC6-4	MENESA		/73	
	CAMAC CARRYING CASE (TAKES 12 MODULES	C/NCC12-6	MENESA		/73	
N	EMPTY MODULE (SAME BUT WIDTH 2,3,4,5,6)	3210	INDUSTR, FABR,	1	/75	
N	BREAD BOARD (FOR 84 IC)	090	POLON		/74	
N	PROTOTYPE ASSEMBLY MODULE (FULL A,F, DECODING, 84WIRE WRAPPED IN SOCKETS)	091	POLON	2	9/76	
N	BREAD BOARD MODULE 1M (MODULE WITH 090 TYPE)	092	POLON	1	/75	
N	BREAD BOARD MODULE 2M (MODULE WITH 090 TYPE)	093	POLON	2	/75	
	BLANK MODULE KIT (SINGLE WIDTH)	BM 1	GEC-ELLIOTT	1	/73	
	(SAME,**2,3 & 4 FOR CORRESP WIDTH)	BM *				
	SINGLE CARD MOUNTING KIT (EMPTY MODULE,SHORT SCREEN PLATE)	CAM/M1/A	IMHOF-BEDCO	1	/72	
	(SAME,**2,3 & 4 FOR CORRESP WIDTH)	CAM/M*/A			/73	
	SINGLE CARD MOUNTING KIT (EMPTY MODULE, (EMPTY MODULE,LONGT SCREEN PLATE)	CAM/M1/B		1	/72	
	(SAME,**2,3 & 4 FOR CORRESP WIDTH)	CAM/M*/B			/73	
	CAMAC HARDWARE	CH-001	KINETIC SYSTEMS	1	/71	(4)
	CAMAC-KASSETTE (EMPTY MODULE,WIDTH 1/25)	2,090,001,8	KNUERR	1	/70	(2)
	(**2,3,4,5,6 FOR CORRESPONDING WIDTHS)	2,090,00*,8			/70	
	CAMAC COMPATIBLE MODULE (EMPTY, WIDTH=1, ALSO IN 2 & 3 UNIT WIDTHS)	NSI 875 DM	NUCL, SPECIALTIES	1	/70	
	CAMAC MODULE (EMPTY MODULE HARDWARE)	NSI 875 CM-100-1	NUCL, SPECIALTIES	1	/72	(6)
	(SAME, ** 2, 3, & 4 FOR CORRESP WIDTH)	NSI 875 CM-100-**			/72	(6)

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	CAMAC MODULE,SHIELDED (EMPTY, 1 WIDTH)	NSI-875-DM/SPH-1	NUCL. SPECIALTIES	1	/71	
	(SAME, *=2, 3, AND 4 FOR CORRESP WIDTH)	NSI-875-DM/SPH-*			/71	
	CAMAC MODULE (EMPTY,W=1/25)	021	POLON	1	/71	
	(*=2,3,4,6 & 8 FOR CORRESP WIDTH)	02*			/71	
	(*=0&2 FOR WIDTH 10 & 12 RESPECTIVELY)	03*			/71	
	EMPTY MODULE 1 UNIT	CCA 1	RDT	1	/70	
	(SAME,*=2,3 & 4 FOR CORRESP WIDTH)	CCA *				
	EMPTY MODULE SCREENED (1 WIDE, ADD TYPE SUFFIX A FOR SHORT, B FOR LONG SCREENS)	CM1	SEMRA-BENNEY	1	/73	
	(DITO, *=2,3,4 OR 6 FOR CORRESP WIDTH)	CM*				
	CAMAC MODULE (EMPTY,1/25 CARD MODULE)	CAMCAS 1	WILLSHER & QUICK	1	/71	(2)
	(*=2,3 & 4 FOR CORRESPONDING WIDTH)	CAMCAS *				(2)
	CAMAC MODULE (EMPTY,1/25 CARD MODULE)	CAMCAS 1-G	WILLSHER & QUICK	1	/72	
	(*=2,3 & 4 FOR CORRESPONDING WIDTH)	CAMCAS *-G			/72	
	CAMAC MODULE(EMPTY,1/25 SCREENED MODULE)	CAMMOD 1-G	WILLSHER & QUICK	1	/72	
	(*=2,3 & 4 FOR CORRESPONDING WIDTH)	CAMMOD *-G			/72	
	CAMAC MODULE(EMPTY,2/25 SCREENED MODULE)	CAMMOD 2	WILLSHER & QUICK	2	/71	(2)
	(*=3 & 4 FOR CORRESPUNDING WIDTH)	CAMMOD *				(2)
	EMTY MODULE WITH HINGED CARDS (2/25)	9905-C82	OSL/WILLSHER&QUICK	2	/73	
	(3/25)	9905-C83		3	/73	
	EMPTY MODULE (1/25)	9905-ST1	OSL/WILLSHER&QUICK	1	/73	
	(**= T2, T3, T4, T5, T6, T8, T10, AND T12 FOR CORRESPONDING WIDTH)	9905-5**			/73	
	TIROIR MODULAIRE POUR COMMANDE	9905-TC-1	OSL	1	/71	
	BLANK CAMAC MODULE PC BOARD (GOLD PLATED & ETCHED FINGERS BOTH SIDES)	NSI-04071-PC	NUCL. SPECIALTIES		/71	
	MK-1 KLUGE MODULE (131 MIXED 14, 16, 24 PIN SOCKETS)	8301	BI NA SYSTEMS	2	/73	
	MK-5 KLUGE MODULE (HAS 70 14 PIN, 13 AND 2 24 PIN WIRE WRAP SOCKETS)	8305		2	/73	
	MK-6 KLUGE MODULE (HAS 34 14 PIN, 16 16 PIN & 3 24 PIN WIRE WRAP SOCKETS)	8306		1	/73	
	CAMAC-UNIVERSAL-BOARD(PRINTED CARD MODULE WITH 28 14-PIN + 28 16-PIN SOCKETS)	DU 200-2900	DORNIER	2	/71	
	CAMAC PROTOTYPE ASSEMBLY BOARDS (MX B1 HAS 68 SITES, MX B2 HAS 80 SITES)	MX B1/MX B2	GEC-ELLIOTT	NA	/71	
	(MX B3 HAS 68 SITES,MX B4 HAS 80 SITES, MX B3/MX B4 INCLUDE 5V CIRCUIT)	MX B3/MX B4		NA	/71	
	PRINTED CIRCUIT TEST BOARD	10	JORWAY	1	/71	
	KLUGE BOARD FOR WIRE WRAP	15	JORWAY	3	/74	
	KLUGE CARD (FOR CREATING YOUR OWN CAMAC MODULES)	2000-36	KINETIC SYSTEMS	1	/71	(4)
	KLUGE WITH 52 POSITION 2D CONNECTOR	2000-52		1	/73	
	KLUGE WITH 25 POSITION D CONNECTOR	2000-25		1		
	EXPERIMENTIERPLATTE (PRINTED CIRCUIT BOARD)	4,000,087,0	KNUERR	NA	/70	
	EXPERIMENTIERPLATTE (P,C,B,)	4,000,088,0		NA	/73	
	DECODED MATRIX BOARD (FOR PROTOTYPE WIRING OF 64 14-PIN SITES, A&F DECODED)	D 21 621	NUCL. ENTERPRISES	0	/74	
	MODULE PRINTED CIRCUIT BOARDS(TAKE 24,16 OR 14 PIN, ON THE WHOLE 1092 PINS)	CBP 1	RDT	NA	/72	
	BLANK MODULE(COMPLETE WITH PRINTED BOARD FOR 69 INTEGRATED CIRCUITS,1 U WIDTH)	BM 2020/1U	SEN	1	/70	
	(SAME,2U WIDTH)	BM 2020/2U		2	/70	
	EXPERIMENT PLATE	C 72468-A453-A1	SIEMENS	1	/72	
	MATRIX BOARD (MAX.DENSITY 70 IC)	9090	NUCL. ENTERPRISES	9	/ 7	(10)
	,437 OTHER RECOMMENDED OR STANDARD COMPONENTS/ACCESS.)					
	RIBBON CABLE FOR LAM GRADER (XXX DENOTES LENGTH IN METERS)	S 4003/XXX	TEKDATA			(14)
	NIM/CAMAC ADAPTOR	NCA-1	GEC-ELLIOTT		/74	
	NIM ADAPTOR	9072	NUCL. ENTERPRISES		/74	
	NIM-CAMAC ADAPTOR	CAN	RDT	NA	/71	
	NIM/CAMAC ADAPTOR	ANC 10	SCHLUMBERGER		/72	
	CAMAC NIM ADAPTOR	CNA 2033	SEN	2	/71	
	LAM GRADER CABLE (20CM, WITH CONNECTORS)	LGC 20	GEC-ELLIOTT		/72	
	(40CM, WITH CONNECTORS)	LGC 40			/72	

NC	DESIGNATION & SHORT DATA	TYPE	MANUFACTURER	WIDTH	DELIV	NPR
	LAM GRADER CABLE		JOERGER			
	52 WAY CANNON 2DB52S HARNESSES LAM GRADER CABLE, XXX= LENGTH IN METERS)	5809/S/52/XXX	TEKDATA		/73	
	LAM GRADER CONNECTOR (52=PIN FIXED MEMBER, TAKES PIN TYPE 031=9540=000)	2 DB 52 P	ITT CANNON		/70	
N	COAXIAL CONNECTOR (PANEL MOUNT, ND=5498, CABLE CONN.,T&L ADAPT, ALSO AVAILABLE)	22 GLA=01=0=2	HUBER+SUHNER		/75	
	COAXIAL CONNECTOR (PANEL MOUNTING, CABLE CONNECTOR HAS TYPE F 00,250 & FS 00,250) T= & L=ADAPTERS, FREE DOUBLE SOCKET, AND ARE ALSO AVAILABLE	RA 00,250	LEMO		/70	(4)

INDEX OF MANUFACTURERS

* *

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